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I, LEANNE MYNOTT, MANAGER EXAMINATION SUPPORT AND SALES hereby certify that annexed is a true copy of the Provisional specification in connection with Application No. 2004906176 for a patent by HOME-RETIRE PTY LTD as filed on 26 October 2004.

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Sixth day of September 2005

LEANNE MYNOTT
<u>MANAGER EXAMINATION SUPPORT AND SALES</u>

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PROVISIONAL SPECIFICATION FOR THE INVENTION ENTITLED:

Arrangements for extracting financial benefits from equity owned in property

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This invention is best described in the following statement:

ARRANGEMENTS FOR EXTRACTING FINANCIAL BENEFITS FROM EQUITY OWNED IN PROPERTY

Field of the Invention

The present invention relates generally to saving arrangements and retirement benefit arrangements, and in particular, to arrangements that build upon the equity in a persons wholly or partially owned home.

Background

People who attain middle age often have invested, through the course of their working lives, in their home. Such people thus often have fully or largely paid up homes while they are still ten to fifteen years away from retirement. The equity which they have in their home may provide them with a feeling of security, however since a persons home does not produce income, the persons equity in their home is not being used productively.

Fig. 1 shows a current saving scheme in which a person 703 receives 702 an income from a business or an employer 701. The person 703 saves 705 a proportion of the income received at 702 in a personal savings fund 706. This fund is typically administered by a bank or a similar organisation. The money in the fund 706 is invested 707 in a personal investment vehicle 708, and yields 709 a return on the investment, this return accumulating in the fund 706. At retirement the person 703 is able to withdraw 710 savings 711 that have accumulated in the fund 708.

Fig. 2 shows a spreadsheet representation 900 depicting operation of the savings scheme of **Fig. 1**. The person 703 has an annual income of $150,000 (see column B row 2, hereinafter referred to by the shortened notation B2) and this income is incremented at 3% per annum (see B3). The person 703 contributes 9% per year (see B4) of their income towards savings. The column A7 – A21 shows a time span of 15 years, during which time the salary of the person 703 increases from $150K in year one (see B7) to $226,888 in

year fifteen (see B21). The annual saving contributions depicted by 705 in **Fig. 1** increase accordingly from $13,500 in the first year to $20,419.96 in the fifteenth year (see C7 – C21). In year one the investment vehicle 708 returns an amount of $675- (see E7) on the $13,500 (see D7) in the fund, and this investment return adds to the savings contribution of $13,905 (see C8) in year 2, thus growing the savings in a compound interest fashion. Under this compounding effect, the balance in the fund 706 in **Fig. 1** starts at $13,500 in year one (see D7), and accumulates to a total of $351,648.51 in year fifteen (see D21), this being the amount available to the person 703 after fifteen years of savings.

When such people approach or reach retirement age, they often have fully or largely paid up homes but may have insufficient income upon which to live, this income being derived from sources such as the savings arrangement described in relation to **Figs. 1 and 2**. Financial products such as reverse mortgages are available, enabling the retiree to "convert" some of the value of their home into income. However, such existing products can be expensive and inconvenient.

Fig. 3 illustrates one prior art arrangement 100 for providing retirement benefits based on a reverse mortgage. A retiree 101 has a home 102 that has either been wholly or partially paid up during his or her working life. The retiree 101 makes a request 104 to a bank 103, or other financial institution, in order to obtain retirement benefits based on the collateral (ie., security) provided by the retirees home 102. The bank 103 takes security 105 based on the retirees equity in the house 102 in order to provide the retirement benefits in the form of a reverse mortgage. An agreement (not shown) is reached between the retiree 101 and the bank 103 setting out the relevant conditions of the reverse mortgage.

The bank 103 approves the loan as depicted by an arrow 106 and, for illustrative purposes, places funds to support the requested retirement benefits in a loan account 107.

Regular payments 108 are made to the retiree 101 from the loan account 107. Accumulating interest charges that are calculated on a compound basis are accumulated, as depicted by an arrow 109, in an illustrative interest account 110.

The regular payments 108 are provided to the retiree 101 for the number of years set out in the agreement between the retiree 101 and the bank 103. Throughout the term of this arrangement interest accumulates per 109 on a compound basis. At the end of the agreed term, the retiree 101 repays, as depicted by an arrow 111, the loan including capital and the accrued interest from 110.

Fig. 4 is a spread-sheet of cash flows for the arrangement of **Fig. 3**. The spreadsheet is based on the following assumptions:

- the equity in the home 102 in **Fig. 3** is $1,000,000.00 (see B2 in the spreadsheet)
- the amount of the loan requested by the retiree is $450,000.00 (see B3);
- the compound interest charged by the bank 103 is 8.95% (see B4).
- the term of the loan is 15 years (see B5);
- the annual payment 108 provided by the bank 103 to the retiree 101 is $30,000.00 (see B6).

Considering year 1 (see A9) a payment (ie a retirement benefit) of $30,000.00 (ie., B9) is provided, as depicted by the arrow 108 in **Fig. 3**, to the retiree 101 by the bank 103. Accordingly, the capital owed by the retiree 101 to the bank 103 (ie., C9) is $30,000.00. The interest owed on the aforementioned payment, based upon the interest rate of 8.95% (ie., B4) is $2,685.00 (ie., D9). Accordingly, at the end of the first year the total amount owed by the retiree 101 to the bank 103 is $32,685.00 (ie., E9) this being made up of the capital owed (ie., C9) plus the interest accrued (ie., D9).

At the beginning of year 2 (ie., A10) an amount of $30,000.00 (ie., B10) is again provided, as depicted by the arrow 108, to the retiree 101 by the bank 103. For illustration in the present description it is assumed that payments are made regularly from the bank 103 to the retiree 101 on an annual basis. Clearly, however, payments can be made on a monthly or any other reasonable basis without changing the nature of the disclosed method. At the end of year 2 the retiree 101 owes capital of $60,000.00 (ie., C10) and interest of $5,610,31 (ie., D10). The interest owed at the end of the second year (ie., D10) is derived by applying the rate of 8.95% (ie., B4) to the total of (a) the payment 108 that was made to the retiree 101 in year 2 (ie., B10) plus (b) the total owed at the end of year 1 (ie., E9). Accordingly, the total amount owed by the retiree 101 at the end of year 2 is $68,295.31 (ie., E10).

At the beginning of year 15 (ie., A23) a payment of $30,000.00 (ie. B23) is made to the retiree 101 by the bank 103. This brings the total capital owed by the retiree 101 to the bank 103 to $450,000.00 (ie., C23). The interest owed for year 15 is $78,524.99 (ie., D23) which is determined by applying the interest rate of 8.95% (ie., B4) to the total of (a) the payment for year 15 (ie., B23) plus (b) the total amount owed at the end of year 14 (ie., E22). Therefore, the total amount owed by the retiree at the end of year 15 is $955,899.24 (ie. E23). This constitutes the amount owed by the retiree 101 to the bank 103 at the end of the 15 year arrangement described in relation to **Fig. 3**.

In summary, the reverse mortgage arrangement described in relation to **Figs. 3** and 4 provides the retiree with an annual retirement benefit of $30,000.00 for a term of 15 years, after which the retiree owes the bank 103 an amount of $955,899.24 (ie. E23). Since the starting equity in the retirees home 102 was $1,000,000.00 (ie (B2) in **Fig. 4**), this arrangement leaves the retiree with $44,100.76 after paying back the loan to the bank 103.

Summary

It is an object of the present invention to substantially overcome, or at least ameliorate, one or more disadvantages of existing arrangements. The arrangements disclosed in the specification that ameliorate one or more disadvantages of existing arrangements have one or both of two distinct elements, respectively referred to as an "equity based retirement savings" element and an "life expectancy retirement annuity" element.

According to a first aspect of the present invention, there is provided a method of generating, for the benefit of a person and a service provider, periodic payments dependent upon equity in property of the person, the method comprising the steps of:

(a) obtaining from a financier a loan secured by the equity, the loan having a principal value and being for a term defined by a number of periods;

(b) investing the loan in a first investment vehicle that yields a first return for each said period on the amount invested; the method further comprising, for a current said period, the steps of:

(i) withdrawing a first fixed proportion and a second fixed proportion of the principal value from the residual of the loan invested in the first investment vehicle;

(ii) paying the first fixed proportion to the financier;

(iii) deducting a charge from said second fixed proportion, said charge comprising the benefit for the service provider;

(iv) investing for the benefit of the person the residual of the second fixed proportion in an investment vehicle yielding a second return for the current period, said second return being lower than the first return;

(c) repeating the steps (i) – (iv) for said number of periods; and

(d) repaying, by the person to the financier at the end of the term, the principal of the loan.

Other aspects of the invention are also disclosed.

Brief Description of the Drawings

Some aspects of the prior art and one or more embodiments of the present invention will now be described with reference to the drawings and appendices, in which:

Fig. 1 shows a current savings arrangement;

Fig. 2 is a spread sheet showing a quantitative example of how the arrangement of **Fig. 1** operates;

Fig. 3 illustrates one prior art arrangement for providing retirement benefits based on a reverse mortgage;

Fig. 4 is a spread-sheet of cash flows for the prior art arrangement of **Fig. 3**;

Fig. 5 illustrates one example of the disclosed equity based retirement savings arrangement;

Fig. 6 shows a process flow for a business model by which the system of **Fig. 5** may be used;

Fig. 7 is a spread sheet showing a quantitative example of how the arrangement of **Fig. 5** operates;

Fig. 8 illustrates one example of the disclosed life expectancy retirement annuity arrangement;

Fig. 9 shows a process flow for a business model by which the system of **Fig. 8** may be used;

Fig. 10 is a spread-sheet of cash flows for the arrangement of **Fig. 8**; and

Fig. 11 depicts one example of how the equity based retirement savings arrangement can be used with the life expectancy retirement annuity technique;

Fig. 12 is a spread-sheet of cash flows for the arrangement of **Fig. 11**;

Fig. 13 is a schematic block diagram of an interconnected computer system upon which described methods for providing the disclosed life expectancy retirement annuity can be practiced; and

Appendix A contains Formula Representations of Spreadsheets in **Figs. 2, 4, 7, 10, and 12.**

Detailed Description including Best Mode

It is to be noted that the discussions contained in the "Background" section and that above relating to prior art arrangements relate to discussions of arrangements which form public knowledge through their use. Such should not be interpreted as a representation by the present inventor or patent applicant that such arrangements in any way form part of the common general knowledge in the art.

Where reference is made in any one or more of the accompanying drawings to steps and/or features, which have the same reference numerals, those steps and/or features have for the purposes of this description the same function(s) or operation(s), unless the contrary intention appears.

Fig. 5 illustrates one example of the disclosed equity based retirement savings arrangement. A person 801 receives 702' an income as depicted by an arrow 702 in **Fig. 1**. The person has equity in property, typically in a home 802. The person 801 requests 807 a Service Provider 804 for a loan based on security derived from the equity the person 801 has in the house 802. The Service Provider 804 arranges 808 a loan from a financier 803, and security, possibly in the form of a mortgage on the house 802, is taken 809 by the financier 803. The financier 803 transfers 810 the requested loan funds to the service provider.

The terms of the aforementioned loan require that a fixed charge, equal to a predetermined proportion of the total loan amount provided by the financier 803, be paid 816 to the financier on a regular basis. This type of arrangement is referred to as a simple interest arrangement. The service provider 804 manages two funds, referred to as Fund A (ie 825), and Fund B (ie 818). The service provider deposits the aforementioned loan into Fund A from which funds are invested 811 by the service provider 804 in high yield, moderate to high risk investment vehicles X (ie 805), yielding 812 a healthy 8.95% rate of return (see D12 in **Fig. 7**) per annum in the example depicted in **Fig. 7.** Fund B is a lower yield "blue chip" fund from which money is invested 819 in lower yield lower risk investment vehicles Y (ie 826), yielding 820 a more conservative 5.00% rate of return (see D13 in **Fig. 7**) per annum in the example depicted in **Fig. 7.** The service provider 804 derives 814 profits from managing the aforementioned funds, and accumulates these profits in a profit account 806. These profits provide one of the commercial returns upon which the service provider 804 builds the service provider's business.

The person 801 makes 823 regular savings contributions (eg see C17 in **Fig. 7**) to the blue chip Fund B (ie 818). The service provider makes 824 regular payouts (eg based on D17 in **Fig. 7**) into the same Fund B. These regular payouts into the Fund B derive from the loan made 810 by the financier 803 on the basis of the security taken 809 over the person's house 802. The regular payouts are made after the service provider deducts a number of charges including a fixed charge that is proportional to the amount of the payout (eg see E17 in **Fig. 7**), and an administration charge that is also proportional to the amount of the payout (eg see F17 in **Fig. 7**). The manner in which the administration charge is determined can vary, and can, for example, be calculated on the basis of a fixed proportion of the loan amount (see D3 in **Fig. 7**). Accordingly, a net payout (eg G17 in **Fig. 7**) is made 824 by the service provider 804 into the Fund B (ie 818 in **Fig. 7**). The

Fund B (ie 818) accordingly grows in a low risk manner, accumulating both the regular contributions made 823 by the person 801 from the income they are continuing to receive 702', and also accumulating the regular net payouts (eg G17 in **Fig. 7**) made 824 by the service provider 804. The assets in the Fund A (ie 825) that derive from the loan received 810 in regard to the equity in the house 802 receive 812 high growth yield from the investment vehicle X (ie 805) but undergo a net decrease with time by virtue of providing 824 the net payouts to Fund B (ie 818) over the term of the loan.

At the end of the term (see D6 in **Fig. 7**) of the loan, the person 801 repays 817 the principal of the loan to the financier 803. The net funds that are available to the person 801 at this point are determined by subtracting the principal of the loan (ie D3 in **Fig. 7**) from the total amount (ie H31 in **Fig. 7**) that has been accumulated in the Fund B (ie 818). This net amount in the example of **Fig. 7** is $418,120 (ie D15 in **Fig. 7**).

The funds that are thus available represent 821 a lump sum 822 that can be used by the person 801 when he or she retires. The specific manner in which the savings 822 are used can be decided by the person 801, however one particularly beneficial way in which the saving 822 can be used are described in relation to **Fig. 11**.

Fig. 6 shows a process 1300 for a business model by which the system of **Fig. 5** may be used. The process 1300 commences with a START step 1301, after which the person 801 logs onto a website (not shown) of the service provider 804 in order to review the product offerings presented by the service provider. In a following step 1303 the person 801 files a request electronically on the aforementioned website. Thereafter, in a step 1304, the service provide 804 reviews the current performance statistics of the funds A and B (ie 825 and 818 respectively), in order to decide how to select the risk profiles to be used when making investments from the Fund A (ie 825) and the Fund B (ie 818) at 811 and 819 respectively. The step 1304 thus conducts an actuarial analysis of the

current performance of the funds A and B (ie 825 and 818 respectively), in order to determine if the funds A and B are presently (a) not meeting, (b) meeting, or (c) exceeding the pre-determined performance parameters.

The following step 1305 identifies the attributes of the investment vehicles to be used for investing the elements of the proposed loan based upon the historic fund performance parameters determined in the step 1304. The steps 1304 and 1305 are shown in bold outline in **Fig. 6** in order to indicate that analysis, usually actuarial, of fund parameters are being performed.

The following description relates specifically to Fund A (ie 825) and the high growth investment vehicle X (ie 805). The same approach is typically used, in an independent manner, in regard to the Fund B (ie 818) and the investment vehicle Y (ie 826).

If the fund A (ie 825) is presently meeting it's pre-defined earning target, then the service provider 804 will provide the new applicant (ie the person 801) with a new loan whose residual value is to be invested (depicted by 811 in **Fig. 5**) in investment vehicles X (ie 805) having the same risk level, and thus the same likely return level, as the previous investment vehicles selected for the previous person who applied for the product provided by the service provider 804. This selection is made in order to ensure that the fund A continues to remain on track, thus meeting it's pre-defined target performance metrics.

In contrast, if the fund A is presently not meeting it's pre-defined earnings target, then the service provider 804 will provide the person 801 with a new loan whose residual value is to be invested at 811 in investment vehicles X (ie 805) having a higher risk level, and thus higher likely returns, than the previous investment vehicles selected for the previous person who applied for the product provided by the service provider 804. This

selection is made in order to ensure that the fund A improves it's performance, thus moving towards meeting it's pre-defined target performance metrics.

If the fund A is presently exceeding it's pre-defined earnings target, then the service provider 804 will provide the person 801 making the new application with a loan whose residual value is to be invested at 811 in investment vehicles X (ie 805) having a lower risk level, and thus a lower likely return, than the corresponding investment vehicles used for the previous fund applicant. This selection is made in order to ensure that the fund A reduces it's performance, and it's corresponding risk, thus moving towards meeting it's pre-defined target performance metrics.

Since there are two funds, namely A and B (ie 825 and 818 respectively), the approach described for the fund A (ie 825) can equally be applied to the fund B (ie 818). This must, however, account for the fact that the fund A (ie 825) operates at a generally higher level of risk and return that the fund B (ie 818).

A following step 1306 sends, over the communications network 620 (see **Fig. 13**) to the PC 601 of the person 801, an electronic agreement for joining the arrangement provided by the service provider 804. In a following step 1308 the person 801 executes the agreement, using appropriate security mechanisms, and sends the executed agreement to the PC 622 of the service provider 804 over the network 620. In a subsequent step 1309, the service provider 804 arranges, electronically over the network 620, with the person 801 and the financier 803, to execute the necessary electronic documents required to transfer (depicted as 809 in **Fig. 5**) the necessary security over the appropriate equity in the person's home 802 to a PC 626 of the financier 203.

The financier then, in a following step 1310, transfers (per 810 in **Fig. 5**) the relevant loan funds to the service provider 804. In a following step 1311, the person 801 makes 823 a periodic deposit as a savings contribution with the service provider 804 to be

deposited into the fund B (ie 818). In a subsequent step 1312, the service provider makes 824 a periodic payment on behalf of the person 801 into the fund B (ie 818), after adding any reward or bonus points which may be appropriate, and deducting any fees and charges which may be appropriate.

It is noted that the periodic payments made 824 to the fund B (ie 818) on behalf of the person 801 may, in one arrangement, be fixed and independent of the performance of the funds A and/or B. In an alternate arrangement, the periodic payment made 824 may be dependent, at least to some degree, upon the performance of the aforementioned funds. The step 1312 is shown in bold outline to indicate that actuarial calculations may be performed upon the funds A and B in order to determine the amount of the periodic payment made at 824, and the amount of any reward or bonus points, to be paid on behalf of the person 801. The step 1312 also applies the fees and charges as appropriate, and invests (per 811 and 819 in **Fig. 5**) the residual of the loans the funds A and B (ie 825 and 818 respectively) in the investment vehicles X and Y respectively (ie 805 and 826) according to the risk profiles determined in the steps 1304 and 1305.

In the step 1312 the service provider 804 can also draw the necessary funds from the funds A and/or B to pay (per 816 in **Fig. 5**) the simple interest payments to the financier 803. Alternatively the simple interest payments to the financier 803 can be paid on a periodic basis not directly coupled to the periodic payments made (per 824 in **Fig. 5**) on behalf of the person 801.

A following test step 1313 determines if the term of the loan has expired. If this is the case, then the process 1300 is directed by a YES arrow to a step 1315 in which the person 801 repays (per 817 in **Fig. 5**) the principal of the loan to the financier 803. The process then terminates with an END step 1316. Returning to the decision step 1313, if

the term of the loan has not yet expired, then the process 1300 is directed according to a NO arrow back to the step 1311.

Fig. 7 is a spread sheet showing a quantitative example of how the arrangement of **Fig.** 5 operates. The spreadsheet is based on the following assumptions:

- The equity of the person 801 in the house 802 in **Fig. 5** is $500,000.00 (see D2);
- The amount of the loan provided 810 by the financier 803 to the service provider 804 is $225,000.00 (see D3);
- The simple interest paid at 816 in **Fig. 5** by the service provide 804 to the financier 803 is 5% (see D4);
- The simple interest paid by the person 801 to the service provider 804 on each regular payment 824 is 8.95% (see D5);
- The term of the loan is 15 years (see D6);
- The periodic payout at 824, prior to deduction of interest and administration fees, made by the service provider 804 into the fund B (ie 818) is $15,000.00 (see D7);
- The administration charge paid by the person 801 to the service provider 804 on each of the aforementioned payments is 1% (see D8);
- The annual income at 702' received by the person 801 is $150,000.00 (see D9);
- The annual salary increment received by the person 801 on their income is 3% (see D10);
- The periodic contribution made by the person 801 at 823 into the fund B (ie 818) is 9% (see D11) of their income 702';

- The investment yield provided 812 by the investment vehicle X (ie 805) on investments made 811 from fund A (ie., 825) in **Fig. 5** is 8.95% (see D12);
- The investment yield provided 820 by the investment vehicle Y (ie. 826) on investments made 819 from fund B (ie., 818) in **Fig. 5** is 5% (see D13); and
- The annual rate of increase in the value of the house 802 is 3.1% (see D14).

Turning to the table comprising the columns A-M and the rows 16-31, the figures in row 17 are described as follows in order to describe the operation of the described arrangement. In year 1 (ie., A17) the person 801 receives 702' a salary of $150,000.00 (ie., B17). The person 801 makes a contribution of $13,500.00, this being 9% (ie., D11) of his or her salary (ie., B17). This contribution is deposited 823 by the person 801 into fund B (ie. 818). This savings stream exemplified by C17 represents an ongoing stream of savings by the person 801 into their fund B over the term of the loan (ie. D6).

A periodic payment of $15,000.00 (ie., D17) is allocated for payment by the service provider 804 into fund B (ie. 818) this $15,000.00 deriving from the loan received by the person 801 from the financier 803. This $15,000.00 is a gross allocation, and before the service provider 804 transfers this amount from fund A (ie 825) to fund B (ie., 818), as depicted by the arrow 824, the service provider 804 deducts an interest charge (ie., E17) and an administration charge (ie., F17) in order to arrive at the amount of $13,507.50 which is the net payment at 824 from the fund A (ie 825) to the fund B (ie 818). The interest deduction at E17 is calculated by applying the simple interest at D5 to the gross payout at D17. The administration fee at F17 is determined by applying the administration fee rate at D8 to the payout at D17.

Column H depicts how fund B (ie 818) grows over the term of the loan. Fund B receives both the income stream depicted by column C (ie., the ongoing savings component from the person 801 based on their income 702') and the net periodic payment in column G which is derived from the loan received by the person 801 from the financier 803. Thus, for example, the $27,007.50 in fund B in year 1 (ie., H17) earns an amount of $1,350.38 (ie., I17) by virtue of the investment yield on fund B (ie., D13) acting on the $27,007.50. The last entry in column H, namely $643,120.96 is the amount accumulated by the end of the 15 year term in fund B. From this amount the principal of the loan, namely $225,000.00 (ie., D3) is deducted in order to arrive at the amount of the funds available for retirement for the person 801, this being $418,120.96 (ie., E5).

From the perspective of the service provider 804, and having regard to row 17 which relates to year 1 of the arrangement shown in **Fig. 7**, the service provider 804 pays an amount of $11,250.00 (J17) to the financier 803, this amount being determined by applying the simple interest of 5% (ie., D4) to the loan of $225,000.00 (ie., D3). Column J shows that this periodic interest charge paid by the service provider 804 to the financier 803 is constant over the term of the loan.

The service provider 804 has, in the first year, an amount of $200,242.50 available for investment in the investment vehicle X (ie., 805), this amount being shown at K17. This amount is equal to the amount of the original loan (ie., $225,000.00 at D3) minus the annual interest charge owed to the financier (ie., J17) less the gross payout to the person 801 (ie., D17) plus the annual interest charge paid by the person 801 on the aforementioned payout (ie., E17) plus the administration fee paid by the person 801 to the service provider 804 (ie., F17). The investment vehicle X (ie., 805) earns an amount of $17,921.70 (ie., L17) according to the yield (d12) of the investment vehicle X acting on the amount in the vehicle X (ie., K17).

Column M depicts the manner in which the house 802 appreciates in value from its initial value of $500,000.00 (ie., D2) under the influence of the rate of increase of value in the market (ie., D14).

In summary, the disclosed equity based retirement savings arrangement described in relation to **Figs. 5** and **7** provides the person 801 with an amount of $643,120.96 after operating the arrangement for a period of 15 years, after which the person owes the bank 103 an amount of $225,000.00 (ie. the principal of the original loan at D3). Accordingly, this equity based retirement savings arrangement leaves the person with $418,120.06 after paying back the principal of the loan to the financier 203. This is 18.9% more that the conventional savings arrangement described in relation to **Figs. 1** and **2**. The service provider derives their profit from one or more elements. One such element is the administration and other charges received from the retiree (per column F in **Fig. 7**).

Fig. 8 illustrates one example of the disclosed life expectancy retirement annuity arrangement. In this arrangement 200 a retiree 201 has, similar to the situation described in relation to **Fig. 3**, a fully or partially paid up home 202. The retiree 201 makes a request as depicted by an arrow 207 to a service provider 204. The service provider 204 arranges, as depicted by an arrow 208, for a loan to be provided at a wholesale interest rate from a financier 203, or from some other wholesale money provider. The financier 203 takes, as depicted by a dashed arrow 209, security on the basis of the equity in the home 202. Thereafter, the financier 203 provides, as depicted by an arrow 210, the loan funds to the service provider 204.

The service provider 204 invests, as depicted by an arrow 211, the loan in investment vehicles 205 that yield a market-based rate of return. The total of the funds invested in the investment vehicles 205 at any time, together with any working capital

held by the service provider, substantially constitutes the "Life Expectancy Retirement Annuity Fund". The service provider 204 draws, as depicted by an arrow 212, funds to be distributed (per 213) to the retiree 201 as well as a profit that the service provider 204 takes (per 214) in respect of services provided. In regard to the profit, an alternative arrangement is for the service provider 204 to derive the profit directly from an administration or other charge paid by the retiree at 215. The service provider 204 provides, as depicted by an arrow 213, regular payments to the retiree 201. The service provider 204 also extracts, as depicted by an arrow 214, the aforementioned profit which is accumulated, for the sake of illustration, in an account 206.

On a periodic basis, the service provider 204 also pays, as depicted by an arrow 216, simple interest to the financier 203 on the total amount of the loan that was provided at 210. The retiree 201 also pays, as depicted by an arrow 215, simple interest on each payment 213 that he or she receives from the service provider 204. This simple interest payment is deducted from the payment to the retiree. This interest payment is simple interest on each payment made, and is not interest on the total amount of the loan provided at 210. Furthermore, the retiree 210 can also pay an administration or other fee, as part of 215, on each payment provided at 213.

The aforementioned process proceeds for the duration of the term originally agreed on between the retiree 201 and the service provider 204. At the end of the aforementioned period, the retiree 201 repays, as depicted by an arrow 217, the capital of the loan to the financier 203, this being the same amount as provided by the financier 203 at 210 at the outset of the aforementioned arrangement. The retiree is not liable for any interest to the financier 203 as the service provider 204 has paid this interest per 216. The repayment 217 of the loan is typically effected through the service provider 204, who receives the money from the retiree 201 and passes it on to the financier 203.

Fig. 9 shows a process flow 500 for a business model by which the system of **Fig.** 8 may be used. The process 500 commences with a start step 501 after which, in a following step 502, the retiree 201 (see **Fig.** 8) logs in, using his Personal Computer (PC) (601 in **Fig.** 13), to the web site of the Service Provider 204 over the communications network (620 in **Fig.** 13) and reviews the life expectancy retirement annuity product details. In a following step 503 the retiree 201 fills in his or her personal details on a software application form displayed by the web site of the service provider 204. This application form includes details such as loan required (up to 45% of the value of the equity owned by the retiree in their home can be approved), home details, personal information, spouse or de-facto spouse details, and beneficiary under the will. The retiree 201 the gives the appropriate commands via the user interface of the users PC to formally make the request (depicted by the arrow 207 in **Fig.** 8) to join the life expectancy life expectancy retirement annuity fund. This request is communicated, together with the retiree's personal details, to the computer (622 in **Fig.** 13) of the service provider 204.

In a following step 504, the service provider 204 reviews the current performance statistics of the life expectancy retirement annuity fund, in order to decide how to select the risk profile to be used when investing the residual of the loan at 211. The step 504 thus reviews the current performance of the life expectancy retirement annuity fund, based upon actuarial analysis of the fund, in order to determine if the fund is presently (a) not meeting, (b) meeting, or (c) exceeding the pre-determined performance parameters.

A following step 505 identifies the attributes of the investment vehicle to be used for investing the residual value of the proposed loan based upon the historic fund performance parameters determined in the step 504. The steps 504 and 505 are shown in bold outline in **Fig.** 9 in order to indicate that analysis of fund parameters are being

performed. If the life expectancy retirement annuity fund is presently meeting it's pre-defined earnings targets, then the service provider will provide the "new" retiree with a loan whose residual value is to be invested (depicted by 211 in **Fig. 8**) in an investment vehicle having the same risk level, and thus the same likely return level, as the previous investment vehicle selected for the previous new fund member. This selection is made in order to ensure that the life expectancy retirement annuity fund continues to remain on track, thus meeting it's pre-defined target performance metrics.

In contrast, if the life expectancy retirement annuity fund is presently not meeting it's pre-defined earnings targets, then the service provider will provide the new retiree with a loan whose residual value is to be invested at 211 in an investment vehicle having a higher risk level, and thus a higher likely return level, than the investment vehicles used for the previous fund applicant. This selection is made in order to ensure that the life expectancy retirement annuity fund improves it's performance, thus moving towards meeting it's pre-defined target performance metrics.

If the life expectancy retirement annuity fund is presently exceeding it's pre-defined earnings targets, then the service provider will provide the new retiree with a loan whose residual value is to be invested at 211 in an investment vehicle having a lower risk level, and thus a lower likely return level, than the investment vehicle used for the previous fund applicant. This selection is made in order to ensure that the life expectancy retirement annuity fund reduces it's performance, and it's associated risk, thus moving towards meeting it's pre-defined target performance metrics.

A following step 506 sends, over the communications network 620 to the PC 601 of the retiree 201, an electronic agreement for joining the fund. In a following step 508 the retiree executes the agreement, using appropriate security mechanisms, and sends the executed agreement to the PC (622) of the service provider 204 over the network 620. In

a subsequent step 509, the service provider 204 arranges, electronically over the network 620, with the retiree 201 and a suitable financier 203, to execute the necessary electronic documents required to transfer (depicted as 209 in **Fig. 8**) the necessary security over the appropriate equity in the retiree's home 202 to a PC (626) of the financier 203.

The financier then, in a following step 510, transfers (per 210 in **Fig. 8**) the relevant loan funds to the service provider. In a following step 511, the service provider makes the periodic payment to the retiree, this possibly being via electronic payment over the network 620, after adding any reward or bonus points which may be appropriate, and deducting any fees and charges which may be appropriate. It is noted that the periodic payment made to the retiree may, in one arrangement, be fixed and independent of the performance of the life expectancy retirement annuity fund as a whole. In an alternate arrangement, the periodic payment may be dependent, at least to some degree, upon the fund performance. The step 511 is shown in bold outline to indicate that actuarial calculations may be performed upon the fund in order to determine the amount of the periodic payment, and the amount of any reward or bonus points, to be paid to the retiree. The step 511 also applies the fees and charges as appropriate, and invests (per 211 in **Fig. 8**) the residual of the loan in an investment vehicle according to the risk profile determined in the step 505. In the step 511 the service provider can also draw the necessary funds from the life expectancy retirement annuity fund to pay (per 216 in **Fig. 8**) the simple interest payments to the financier 203. Alternately, the simple interest payments to the financier 203 can be paid on a periodic basis not directly coupled to the periodic payments made (per 213 in **Fig. 8**) to the retiree.

A following test step 512 determines if the term of the loan has expired. If this is the case, then the process 500 is directed by a YES arrow to a step 513 in which the retiree 201 repays (per 217 in **Fig. 8**) the principal of the loan back to the financier 203.

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The process then terminates with a STOP step 514. Returning to the decision step 512, if the term of the loan has not yet expired, then the process 500 is directed according to a NO arrow back to the step 511.

Fig. 10 is a spread-sheet of cash flows for the arrangement of **Fig. 8**. The spreadsheet is based on the following assumptions:

- the equity in the home 202 in **Fig. 8** is $1,000,000.00 (see B2 in the spreadsheet in **Fig. 10**);
- the amount of the loan provided by the financier 203 as requested by the retiree is $450,000.00 (see B3);
- the simple interest paid at 216 by the service provider 204 to the financier 203 is 4.67% (see B4).
- the simple interest on each payment paid by the retiree 201 to the service provider 204 at 215 is 8.95% (ie. B5);
- the interest (ie., the yield) on the investment funds provided at 211 from the service provider 204 to investment vehicles 205 is 8.95% (ie. B6);
- the administration charge (or other charge) paid by the retiree 201 at 215 to the service provider 204 in respect of, and deducted from, each regular payment at 213 is 0.20% (ie., B7); and
- the term of the loan arrangement described in the present example is 15 years (ie. B8).

Turning to the table comprising the columns A-H and the rows 11-25 of the spreadsheet, Column A depicts the year being considered, column B depicts the annual (ie the periodic) payment made by the service provider 204 to the retiree 201, and column C depicts the periodic (interest) payment made at 215 by the retiree to the service provider

204. Column D depicts the periodic (administration fee or other) payment made at 215 by the retiree to the service provider 204, and column E depicts the net amount left in the hands of the retiree 201 after the retiree has received the payment in column B and paid the charges in the columns C and D. Column F depicts the periodic payment made by the service provider 206 to the financier 203, and column G depicts the funds available to the service provider 204 for investment in the investment vehicles 205. Column H depicts the return provided by the investment vehicles 205 on the amount invested (see Column G) each period.

Considering year 1 (ie., A11) a payment of $32,987.00 (ie. B11) is made at 213 from the service provider 204 to the retiree 201. The retiree pays simple interest of $2,952.34 (ie C11) to the service provider 204 at 215, this being simple interest levied on the payment made (ie., B11) at 8.95% (ie., B5). In addition, the retiree 201 pays at 215 an administration fee of $65.97 (ie., D11) this being a charge at 0.20% (ie. B7) levied on the payment made at B11. Accordingly, the net periodic payment in the hand of the retiree 201 after receiving the payment 213 and paying the simple interest and the administration fee 215 is $29,968.69 (ie., E11).

Clearly the various dollar amounts and interest rates can be changed without impacting on the inventive concept, however the numbers have been selected to ensure that the payment in the hands of the retirees 101 and 201 respectively are close enough for a meaningful comparison to be made between the arrangements shown in **Figs. 3** and 4 respectively. It is noted that in regard to **Fig. 3** the payment in hand received by the retiree 101 is $30,000.00 per time period, (eg., B9 in **Fig. 4**) and the payment received in hand by the retiree 201 in **Fig. 8** is approximately the same, this being $29,968.69 (eg., E11 in **Fig. 10**).

The periodic simple interest paid by the service provider 204 to the financier 203 at 216 is $21,015.00 (ie F11). This derives from applying the simple interest rate of 4.67% (ie., B4) to the total loan amount of $450,000.00 (ie., B3).

The amount of money available to the service provider for investment, as depicted by 211, in the investment vehicles 205 is $398,950.34 (ie., G11). This amount is equal to the total loan amount of $450,000.00 (ie., B3) less the payment for year 1 of $32,950.34 (ie., B11) that was made at 213 to the retiree 201, plus the interest payment at 215 paid by the retiree to the service provide 204 (ie., C11) minus the interest payment at 216 paid by the service provider 204 to the financier 203 (ie., F11). The annual yield provided by the investment vehicles 205 is $35,706.06 (ie., H11) which is the rate of 8.95% (ie., B6) acting in a compound manner on the invested funds (ie. G11).

At the beginning of year 2 (ie., A12) the service provider makes the regular payment 213 to the retiree 201 to the amount of $32,987.00 (ie., B12). The retiree 201 pays, at 215, the simple interest of 8.95% (ie., B5) on the aforementioned payment at B12. The retiree 201 similarly pays the periodic administration charge of $65.97 (ie., D12) which derives from the simple interest of 0.20% (ie., B7) applied to the payment of $32,987.00 (ie., B12). The retiree 201 thus has $29,968.69 (ie. E12) in hand, as was the case in year 1 (ie., E11).

The service provider 204 pays the simple interest charge of $21,015.00 at 216 (ie F12) to the financier 203, this deriving from the simple interest of 4.67% (ie. B4) applied to the entire loan value of $450,000.00 (ie., B3). The funds available to the service provider for investing at 211 in the investment vehicles 205 during year 2 amount to $383,606.73 (ie G12). This figure is made up of the amount available during year 1 namely $398,950.34 (ie. G11) plus the earnings from the investment vehicles 205 of $35,706.06 (ie., H11) less the periodic payment of $32,987.00 at 213 to the retiree 201

(ie., B12) plus the interest paid by the retiree 201 of $2,952.34 (ie., C12) less the simple interest charges paid by the service provider 204 at 216 to the financier 203. In summary, therefore, the service provider draws, at 212, an amount of $51,049.67. This reflects the difference between the $398,950.34 invested in the investment vehicles 205 in year 1 (ie., G11) plus the earnings from the investment vehicles 205 of $35,706.06 (ie., H11) minus the amount of funds available for investment in the investment vehicles 205 in year 2, this amount being $383,606.73 (ie., G12).

At the beginning of year 15 (ie., A25) the regular payment 213 is made to the retiree 201 (ie., B25), and the retiree 201 pays the simple interest charge at 215 to the service provider 204 (ie., C25). The retiree 201 also makes the periodic administration payment at D25 to the service provider 204, thus having the amount of $29,968.69 in hand at E25. The service provider 204 makes the final interest payment of $21,015.00 (ie., F25) at 216 to the financier 203, leaving only $1,159.96 at G25 for investment in the investment vehicles 205. This situation constitutes the end of the particular agreement between the retiree 201 and the service provider 204. Accordingly, the retiree 201 pays back the principal of the loan ie., $450,000.00 (ie., B3), as depicted by 217, to the financier 203.

In the present example, the profit at 214 for the service provider 204 derives purely from the annual administration payments at 215 from the retiree 201 (ie., D11-D25). According to another example, the profit 214 can be derived from the funds drawn at 212.

In summary, the disclosed life expectancy retirement annuity arrangement described in relation to **Figs. 8** and **10** provides the retiree with an annual life expectancy retirement annuity of $29,968.69 for a term of 15 years, after which the retiree owes the bank 103 an amount of $450,000.00 (ie. the capital of the original loan at B3). It is noted,

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however, that the retiree has, during the term of the life expectancy retirement annuity arrangement, paid out an amount of $44,285.05 in simple interest charges at 215 in **Fig. 8**, plus an amount of $989.61 in administration (or other) charges at 215 in **Fig. 8**. Accordingly, the total amount paid out by the retiree by the end of the relevant term is $495,274.66 (see C3). Since the starting equity in the retirees home 202 was $1,000,000.00 (ie (B2) in **Fig. 10**, this life expectancy retirement annuity arrangement leaves the retiree with $504,725.34 after paying back the loan to the financier 203. The service provider derives their profit from one or more elements. One such element is the investment (per 211 in **Fig. 8**) of the initial loan. Other profit elements include the administration and other charges received from the retiree (per 215 in **Fig. 8**).

The retiree can be made responsible for payment of the approved valuers fees (in consideration for obtaining a valuation of their home 202 prior to obtaining the loan from the financier 203), mortgage costs associated with the obtaining the loan from the financier 203, stamp duty and mortgage insurance.

Fig. 11 depicts one example of how the equity based retirement savings arrangement can be used with the life expectancy retirement annuity technique. As noted in regard to **Fig. 5**, the person 801 is free to use the lump sum 822 in any manner he or she sees fit, however it is particularly advantageous to incorporate the lump sum into the life expectancy retirement annuity arrangement as an initial lump sum. In some legislative frameworks, this can have additional benefits from the perspective of tax and social security, particularly if the life expectancy retirement annuity funds are classified as "complying funds" for these purposes.

The arrangement in **Fig. 11** operates in the same manner as that described in relation to **Fig. 8** apart from the fact that the savings 822 accumulated by the person 801 in the equity based retirement savings arrangement of **Fig. 5** are applied as an initial lump

sum 1219 in **Fig. 11**. The arrangement shown in **Fig. 11** is identical to that described in relation to **Fig. 8** except for the aforementioned additional feature. In **Fig. 8** the person 201 uses equity in their house 202 in order to secure a loan from the financier 203 which forms the basis of regular payments 213. At the end of the loan period the person 201 in **Fig. 8** repays 217 the principal of the loan to the financier 203. In **Fig. 11** a retiree 1201 similarly obtains a loan from a financier 1203 on the basis of security 1209 over the house 1202 of the retiree 1201. The aforementioned loan forms the basis for regular payments 1213 from a service provider 1204 to the retiree 1201. However, in **Fig. 11** unlike in **Fig. 8** the retiree 1201 has an additional initial lump sum 1219 which has been accumulated according to the arrangement 800 in **Fig. 5**. This lump sum 1219 is incorporated into the arrangement provided by the service provider 1204 and increments the regular payments 1213.

Fig. 12 is a spread-sheet of cash flows for the arrangement of **Fig. 11**. The cash flows are based on the following assumptions:

- the value of the house 1202 is a million dollars (B2);
- the amount of the loan received from the financier 1203 is $450,000.00 (ie., B3);
- the initial lump sum in 1219 is $418,120.96 (B4). This being the same figure derived in the arrangement in **Fig. 7** (see E5);
- the simple interest at 1216 paid by the service provider 1204 to the financier 1203 is 4.67% (B5);
- the interest paid by the retiree 1201 to the service provider 1204 on the loan component of the regular payment 1213 is 8.95% (B6);
- the interest paid by the retiree 1201 to the service provider 1204 on the lump sum component of the regular payment 1213 is 0% (B7);

- the rate of return on the funds invested in the investment vehicle 1205 is 8.95% (B8);
- the administration charge paid by the retiree 1201 on each regular payment 1213 (this being levied on the entire payment 1213, ie., both the component deriving from the loan and from the lump sum 1219) is 0.2% (B9);
- the term of the loan is 15 years (B10);
- the annual gross payout from the service provider to the retiree based upon the loan from the financier is $32,987.00 (B11); and
- the annual payout from the lump sum 1219 is $42,300.00 (B12).

In year 1 (A14) the retiree 1201 receives a gross payment of $75,287.00 (B14) this deriving both from the annual payment from the loan and from the lump sum (ie., B11 plus B12). On this combined amount the retiree 1201 pays an interest charge to the service provider of $2,952.34 (C14) this interest being levied only on the loan component of the regular payment 1213 ie $32,987 (B11). An amount of zero dollars (D14) is paid by the retiree to the service provider (D14) on the lump sum component 1219 ie $42,300 (B12). Accordingly, the total annual interest charges paid by the retiree to the service provider are $2,952.34 (E14). An additional administration charge of $150.57 (F14) is also deducted from the gross amount of $75,287.00 (at B14) resulting in an annual net payment to the retiree of $72,184.09 (G14). The annual interest charge paid by the service provider to the financier is $21,015.00 (H14) which in the first year leaves an amount of $774,771.30 for investment in the investment vehicle 1205 (I14). This earns an annual amount of $69,342.03 in the year 1 (J14).

Fig. 13 is a general-purpose computer system 600, wherein the processes of **Figs. 8-9** may be implemented as software, such as one or more application program modules executing within the computer system 600. In particular, the steps of generating periodic payments for a retiree are effected by instructions in the software modules that are carried out by the computers in the computer system 600. The instructions may be formed as one or more code modules, each for performing one or more particular tasks. Each software module may also be divided into two separate parts, in which a first part performs the generating periodic payments for a retiree methods and a second part manages a user interface between the first part and the user. The software modules may be stored in computer readable media, including the storage devices described below, for example. The software modules are loaded into the computers from the computer readable media, and then executed by the computers. A computer readable medium having such software or computer program recorded on it is a computer program product. The use of the computer program products in the computers preferably effects an advantageous apparatus for generating periodic payments for a retiree .

The computer system 500 is formed by the retiree computer module 601, the service provider computer module 622, and the financier computer module 626. The following description relates to the retiree computer module 601, however the description applies equally, with relevant modifications, to the service provider computer module 622, and the financier computer module 626.

The retiree computer module 601 also comprises input devices such as a keyboard 602 and mouse 603, output devices including a printer 615, a display device 614 and loudspeakers 617. A Modulator-Demodulator (Modem) transceiver device 616 is used by the computer module 601 for communicating to and from a communications network 620, for example connectable via a telephone line 621 or other

functional medium. The modem 616 can be used to obtain access to the Internet, and other network systems, such as a Local Area Network (LAN) or a Wide Area Network (WAN), and may be incorporated into the computer module 601 in some implementations.

The retiree computer module 601 typically includes at least one processor unit 605, and a memory unit 606, for example formed from semiconductor random access memory (RAM) and read only memory (ROM). The service provider computer module 622 typically includes at least one processor unit 623, and a memory unit 624, for example formed from semiconductor random access memory (RAM) and read only memory (ROM). The financier computer module 626 typically includes at least one processor unit 627, and a memory unit 628, for example formed from semiconductor random access memory (RAM) and read only memory (ROM).

The module 501 also includes an number of input/output (I/O) interfaces including an audio-video interface 607 that couples to the video display 614 and loudspeakers 617, an I/O interface 613 for the keyboard 602 and mouse 603 and optionally a joystick (not illustrated), and an interface 608 for the modem 616 and printer 615. In some implementations, the modem 616 may be incorporated within the computer module 601, for example within the interface 608. A storage device 609 is provided and typically includes a hard disk drive 610 and a floppy disk drive 611. A magnetic tape drive (not illustrated) may also be used. A CD-ROM drive 612 is typically provided as a non-volatile source of data. The components 605 to 613 of the computer module 601, typically communicate via an interconnected bus 604 and in a manner which results in a conventional mode of operation of the computer system 600 known to those in the relevant art. Examples of computers on which the described arrangements can be

practised include IBM-PC's and compatibles, Sun Sparcstations or alike computer systems evolved therefrom.

Typically, the application program modules for the retiree computer module 601 is resident on the hard disk drive 610 and read and controlled in its execution by the processor 605. Intermediate storage of the program modules and any data fetched from the network 620 may be accomplished using the semiconductor memory 606, possibly in concert with the hard disk drive 610. In some instances, the application program modules may be supplied to the retiree encoded on a CD-ROM or floppy disk and read via the corresponding drive 612 or 611, or alternatively may be read by the retiree computer module 601 from the network 620 via the modem device 616. Still further, the software can also be loaded into the computer system 600 from other computer readable media. The term "computer readable medium" as used herein refers to any storage or transmission medium that participates in providing instructions and/or data to the computer system 600 for execution and/or processing. Examples of storage media include floppy disks, magnetic tape, CD-ROM, a hard disk drive, a ROM or integrated circuit, a magneto-optical disk, or a computer readable card such as a PCMCIA card and the like, whether or not such devices are internal or external of the computer modules 601, 622 and 626. Examples of transmission media include radio or infra-red transmission channels as well as a network connection to another computer or networked device, and the Internet or Intranets including e-mail transmissions and information recorded on Websites and the like.

Industrial Applicability

It is apparent from the above that the arrangements described are applicable to the financial investment and planning industries.

The foregoing describes only some embodiments of the present invention, and modifications and/or changes can be made thereto without departing from the scope and spirit of the invention, the embodiments being illustrative and not restrictive.

Thus, in some arrangements, the disclosed arrangements can usually qualify as a Life Expectancy income stream retirement product under Social Security Rules, thus being eligible for inclusion in long term assets test exempt category. The disclosed life expectancy retirement annuity arrangement may thus be arranged to be "complying" under the Social Security Rules, and thus be exempt from asset tests (and, in some cases income tax). The disclosed financial product can also be arranged to be non-commutable but reversionary, so that in the event of the retirees death, 100% of the payments continue for the loan term to be payable to the spouse or de-facto spouse or beneficiary named in a Will. Other benefits can be bundled with the disclosed life expectancy retirement annuity financial product. Free or low cost accident insurance can be offered to the retiree as part of the package, with the service provider absorbing some or all costs of such cover. The service provider can arrange for self-insurance to ensure that the repayment of the loan to the financier at the end of the loan is ensured against unforeseen significant falls in the property market.

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In the context of this specification, the word "comprising" means "including principally but not necessarily solely" or "having" or "including", and not "consisting only of". Variations of the word "comprising", such as "comprise" and "comprises" have correspondingly varied meanings.

Appendix A

Formula Representations of Spreadsheets in **Figs. 2, 4, 7, 10, and 12**

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	A	B	C	D	E
1	**Present savings arrangement**	(Fig. 2)			
2	annual salary	150000	**Funds available for retirement**		
3	salary increment	0.03	=D21		
4	superannuation contrib	0.09			
5	investment yield	0.05			
6	year	salary	super. Contrib. (P -> P.S. Fund)	funds available for investment	annual return from investment
7	1	=B2	=$B$4*B7	=C7	=D7*$B$5
8	2	=B7*(1+$B$3)	=$B$4*B8	=D7+E7+C8	=D8*$B$5
9	3	=B8*(1+$B$3)	=$B$4*B9	=D8+E8+C9	=D9*$B$5
10	4	=B9*(1+$B$3)	=$B$4*B10	=D9+E9+C10	=D10*$B$5
11	5	=B10*(1+$B$3)	=$B$4*B11	=D10+E10+C11	=D11*$B$5
12	6	=B11*(1+$B$3)	=$B$4*B12	=D11+E11+C12	=D12*$B$5
13	7	=B12*(1+$B$3)	=$B$4*B13	=D12+E12+C13	=D13*$B$5
14	8	=B13*(1+$B$3)	=$B$4*B14	=D13+E13+C14	=D14*$B$5
15	9	=B14*(1+$B$3)	=$B$4*B15	=D14+E14+C15	=D15*$B$5
16	10	=B15*(1+$B$3)	=$B$4*B16	=D15+E15+C16	=D16*$B$5
17	11	=B16*(1+$B$3)	=$B$4*B17	=D16+E16+C17	=D17*$B$5
18	12	=B17*(1+$B$3)	=$B$4*B18	=D17+E17+C18	=D18*$B$5
19	13	=B18*(1+$B$3)	=$B$4*B19	=D18+E18+C19	=D19*$B$5
20	14	=B19*(1+$B$3)	=$B$4*B20	=D19+E19+C20	=D20*$B$5
21	15	=B20*(1+$B$3)	=$B$4*B21	=D20+E20+C21	

	A	B	C	D	E	F
1	**Reverse Mortgage Arrangement**	(Fig. 4)				
2	value of property	1000000	**Amount to be r**			
3	amount of loan	450000	***=E23***			
4	interest	0.0895				
5	loan term	15				
6	annual payment	=B3/B5				
7	home value increase rate	0.031				
8	**year**	**payment**	**capital owed**	**interest owed**	**total owed**	**home value**
9	1	=$B$6	=B9	=C9*$B$4	=D9+C9	=B2
10	2	=$B$6	=B10+C9	=(B10+E9)*$B$4	=E9+D10+B10	=(1+$B$7)*F9
11	3	=$B$6	=B11+C10	=(B11+E10)*$B$4	=E10+D11+B11	=(1+$B$7)*F10
12	4	=$B$6	=B12+C11	=(B12+E11)*$B$4	=E11+D12+B12	=(1+$B$7)*F11
13	5	=$B$6	=B13+C12	=(B13+E12)*$B$4	=E12+D13+B13	=(1+$B$7)*F12
14	6	=$B$6	=B14+C13	=(B14+E13)*$B$4	=E13+D14+B14	=(1+$B$7)*F13
15	7	=$B$6	=B15+C14	=(B15+E14)*$B$4	=E14+D15+B15	=(1+$B$7)*F14
16	8	=$B$6	=B16+C15	=(B16+E15)*$B$4	=E15+D16+B16	=(1+$B$7)*F15
17	9	=$B$6	=B17+C16	=(B17+E16)*$B$4	=E16+D17+B17	=(1+$B$7)*F16
18	10	=$B$6	=B18+C17	=(B18+E17)*$B$4	=E17+D18+B18	=(1+$B$7)*F17
19	11	=$B$6	=B19+C18	=(B19+E18)*$B$4	=E18+D19+B19	=(1+$B$7)*F18
20	12	=$B$6	=B20+C19	=(B20+E19)*$B$4	=E19+D20+B20	=(1+$B$7)*F19
21	13	=$B$6	=B21+C20	=(B21+E20)*$B$4	=E20+D21+B21	=(1+$B$7)*F20
22	14	=$B$6	=B22+C21	=(B22+E21)*$B$4	=E21+D22+B22	=(1+$B$7)*F21
23	15	=$B$6	=B23+C22	=(B23+E22)*$B$4	**=E22+D23+B23**	=(1+$B$7)*F22

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	A	B	C	D	E	F	G	H	I
1	Retirement savings arrangement	(Fig: 7)							
2	equity in property			500000					
3	amount of loan (financier -> SP)			225000					
4	simple interest (SP -> financier)			0.05	Funds availabl				
5	simple interest (P -> SP)			0.0895	=D15				
6	loan term			15					
7	annual payout (SP -> SP Fund B)			=D3/D6					
8	admin charge (Retiree > SP)			0.01					
9	annual salary (PA)			150000					
10	salary increment (PA)			0.03					
11	Superannuation contribution			0.09					
12	Investment yield on SP Fund A			0.0895					
13	Investment yield on SP Fund B			0.05					
14	home value increase rate			0.031					
15	balance of SP Fund B available at term			=H31-D3					
16	year	salary	annual savings (super. Contrib.) (P -> S.P. Fund B)	Gross annual Loan payout (SP fund A -> SP fund B)	Annual interest (P -> SP)	Annual admin fee (P -> SP)	Net annual Loan payout (SP fund A -> SP fund B)	SP Fund B available for investment	Annual return from SP Fund B
17	1	=D9	=$D$11*B17	=$D$7	=$D$5*D17	=$D$8*D17	=D17-E17-F17	=C17+D17-E17-F17	=$D$13*H17
18	2	=B17*(1+$D$10)	=$D$11*B18	=$D$7	=$D$5*D18	=$D$8*D18	=D18-E18-F18	=H17+I17+C18+D18-E18-F18	=$D$13*H18
19	3	=B18*(1+$D$10)	=$D$11*B19	=$D$7	=$D$5*D19	=$D$8*D19	=D19-E19-F19	=H18+I18+C19+D19-E19-F19	=$D$13*H19
20	4	=B19*(1+$D$10)	=$D$11*B20	=$D$7	=$D$5*D20	=$D$8*D20	=D20-E20-F20	=H19+I19+C20+D20-E20-F20	=$D$13*H20
21	5	=B20*(1+$D$10)	=$D$11*B21	=$D$7	=$D$5*D21	=$D$8*D21	=D21-E21-F21	=H20+I20+C21+D21-E21-F21	=$D$13*H21
22	6	=B21*(1+$D$10)	=$D$11*B22	=$D$7	=$D$5*D22	=$D$8*D22	=D22-E22-F22	=H21+I21+C22+D22-E22-F22	=$D$13*H22
23	7	=B22*(1+$D$10)	=$D$11*B23	=$D$7	=$D$5*D23	=$D$8*D23	=D23-E23-F23	=H22+I22+C23+D23-E23-F23	=$D$13*H23
24	8	=B23*(1+$D$10)	=$D$11*B24	=$D$7	=$D$5*D24	=$D$8*D24	=D24-E24-F24	=H23+I23+C24+D24-E24-F24	=$D$13*H24
25	9	=B24*(1+$D$10)	=$D$11*B25	=$D$7	=$D$5*D25	=$D$8*D25	=D25-E25-F25	=H24+I24+C25+D25-E25-F25	=$D$13*H25
26	10	=B25*(1+$D$10)	=$D$11*B26	=$D$7	=$D$5*D26	=$D$8*D26	=D26-E26-F26	=H25+I25+C26+D26-E26-F26	=$D$13*H26
27	11	=B26*(1+$D$10)	=$D$11*B27	=$D$7	=$D$5*D27	=$D$8*D27	=D27-E27-F27	=H26+I26+C27+D27-E27-F27	=$D$13*H27
28	12	=B27*(1+$D$10)	=$D$11*B28	=$D$7	=$D$5*D28	=$D$8*D28	=D28-E28-F28	=H27+I27+C28+D28-E28-F28	=$D$13*H28
29	13	=B28*(1+$D$10)	=$D$11*B29	=$D$7	=$D$5*D29	=$D$8*D29	=D29-E29-F29	=H28+I28+C29+D29-E29-F29	=$D$13*H29
30	14	=B29*(1+$D$10)	=$D$11*B30	=$D$7	=$D$5*D30	=$D$8*D30	=D30-E30-F30	=H29+I29+C30+D30-E30-F30	=$D$13*H30
31	15	=B30*(1+$D$10)	=$D$11*B31	=$D$7	=$D$5*D31	=$D$8*D31	=D31-E31-F31	=H30+I30+C31+D31-E31-F31	
32		=SUM(B17:B31)	=SUM(C17:C31)	=SUM(D17:D	=SUM(E17:E31	=SUM(F17:F31)	=SUM(G17:G31)		
33							=G32+C32		

	J	K	L	M
1	Fig. 7: (cont'd)			
2				
3				
4				
5				
6				
7				
8				
9				
10				
11				
12				
13				
14				
15				
16	Annual interest (SP -> financier)	SP Fund A available for investment	Annual return from SP Fund A	Home market value
17	=$D$3*$D$4	=$D$3-J17-D17+E17+F17	=$D$12*K17	=D2
18	=$D$3*$D$4	=K17+L17-J18-D18+E18+F18	=$D$12*K18	=M17*(1+$D$14)
19	=$D$3*$D$4	=K18+L18-J19-D19+E19+F19	=$D$12*K19	=M18*(1+$D$14)
20	=$D$3*$D$4	=K19+L19-J20-D20+E20+F20	=$D$12*K20	=M19*(1+$D$14)
21	=$D$3*$D$4	=K20+L20-J21-D21+E21+F21	=$D$12*K21	=M20*(1+$D$14)
22	=$D$3*$D$4	=K21+L21-J22-D22+E22+F22	=$D$12*K22	=M21*(1+$D$14)
23	=$D$3*$D$4	=K22+L22-J23-D23+E23+F23	=$D$12*K23	=M22*(1+$D$14)
24	=$D$3*$D$4	=K23+L23-J24-D24+E24+F24	=$D$12*K24	=M23*(1+$D$14)
25	=$D$3*$D$4	=K24+L24-J25-D25+E25+F25	=$D$12*K25	=M24*(1+$D$14)
26	=$D$3*$D$4	=K25+L25-J26-D26+E26+F26	=$D$12*K26	=M25*(1+$D$14)
27	=$D$3*$D$4	=K26+L26-J27-D27+E27+F27	=$D$12*K27	=M26*(1+$D$14)
28	=$D$3*$D$4	=K27+L27-J28-D28+E28+F28	=$D$12*K28	=M27*(1+$D$14)
29	=$D$3*$D$4	=K28+L28-J29-D29+E29+F29	=$D$12*K29	=M28*(1+$D$14)
30	=$D$3*$D$4	=K29+L29-J30-D30+E30+F30	=$D$12*K30	=M29*(1+$D$14)
31	=$D$3*$D$4	=K30+L30-J31-D31+E31+F31		=M30*(1+$D$14)
32				
33				

	A	B	C	D	E	F
1	**Retirement Annuity Arrangement**	(Fig. 10)				
2	value of property	1000000	**Retiree annu**			
3	amount of loan	450000	***=B3+SUM(C1***			
4	interest (SP > Financier)	0.0467				
5	interest (Retiree > SP)	0.0895				
6	interest (Money Market > SP)	0.0895				
7	admin charge (Retiree > SP)	0.002				
8	loan term (term)	15				
9	annual payment	='Rev mort'!B6+2922+65				
10	year	annual payment: SP > Retiree	annual interest: Retiree > SP	annual admin charge: Retiree > SP	annual net payment: SP > Retiree	annual interest: SP > Financier
11	1	=$B$9	=B11*$B$5	=B11*$B$7	=B11-C11-D11	=$B$4*$B$3
12	2	=$B$9	=B12*$B$5	=B12*$B$7	=B12-C12-D12	=$B$4*$B$3
13	3	=$B$9	=B13*$B$5	=B13*$B$7	=B13-C13-D13	=$B$4*$B$3
14	4	=$B$9	=B14*$B$5	=B14*$B$7	=B14-C14-D14	=$B$4*$B$3
15	5	=$B$9	=B15*$B$5	=B15*$B$7	=B15-C15-D15	=$B$4*$B$3
16	6	=$B$9	=B16*$B$5	=B16*$B$7	=B16-C16-D16	=$B$4*$B$3
17	7	=$B$9	=B17*$B$5	=B17*$B$7	=B17-C17-D17	=$B$4*$B$3
18	8	=$B$9	=B18*$B$5	=B18*$B$7	=B18-C18-D18	=$B$4*$B$3
19	9	=$B$9	=B19*$B$5	=B19*$B$7	=B19-C19-D19	=$B$4*$B$3
20	10	=$B$9	=B20*$B$5	=B20*$B$7	=B20-C20-D20	=$B$4*$B$3
21	11	=$B$9	=B21*$B$5	=B21*$B$7	=B21-C21-D21	=$B$4*$B$3
22	12	=$B$9	=B22*$B$5	=B22*$B$7	=B22-C22-D22	=$B$4*$B$3
23	13	=$B$9	=B23*$B$5	=B23*$B$7	=B23-C23-D23	=$B$4*$B$3
24	14	=$B$9	=B24*$B$5	=B24*$B$7	=B24-C24-D24	=$B$4*$B$3
25	15	=$B$9	=B25*$B$5	=B25*$B$7	=B25-C25-D25	=$B$4*$B$3

	G	H
1	Fig. 10 (cont'd)	
2		
3		
4		
5		
6		
7		
8		
9		
10	SP Funds in Money Market	annual interest: Money Market > SP
11	=B3-B11+C11-F11	=G11*$B$6
12	=G11+H11-B12+C12-F12	=G12*$B$6
13	=G12+H12-B13+C13-F13	=G13*$B$6
14	=G13+H13-B14+C14-F14	=G14*$B$6
15	=G14+H14-B15+C15-F15	=G15*$B$6
16	=G15+H15-B16+C16-F16	=G16*$B$6
17	=G16+H16-B17+C17-F17	=G17*$B$6
18	=G17+H17-B18+C18-F18	=G18*$B$6
19	=G18+H18-B19+C19-F19	=G19*$B$6
20	=G19+H19-B20+C20-F20	=G20*$B$6
21	=G20+H20-B21+C21-F21	=G21*$B$6
22	=G21+H21-B22+C22-F22	=G22*$B$6
23	=G22+H22-B23+C23-F23	=G23*$B$6
24	=G23+H23-B24+C24-F24	=G24*$B$6
25	=G24+H24-B25+C25-F25	=G25*$B$6

	A	B	C	D	E	F	G	H
1	**Retirement Annuity Arrangement**	(79.12)						
2	value of property	1000000						
3	amount of loan	450000	**Retiree annual p**					
4	initial lump sum	='Ret. savings'!D15	*=B3+E30+F30*					
5	interest (SP -> Financier)	0.0467						
6	interest on loan payouts (Retiree -> SP)	0.0895						
7	interest on lump sum payouts (Retiree -> SP)	0						
8	interest (Money Market -> SP)	0.0895						
9	admin charge (Retiree -> SP)	0.002						
10	loan term (term)	15						
11	annual payout from loan (SP -> R)	='Ret ann (loan, no lump sum)'!B9						
12	annual payout from lump sum (SP ->R)	42300						
13	year	annual payment: SP -> Retiree	annual interest on loan component: Retiree -> SP	annual interest on lump sum component: Retiree -> SP	total annual interest charges Retiree -> SP	annual admin charge: Retiree -> SP	annual net payment: SP -> Retiree	annual interest: SP -> Financier
14	1	=$B$11+$B$12	=$B$11*$B$6	=$B$12*$B$7	=C14+D14	=$B$9*($B$11+$B$12)	=B14-E14-F14	=$B$5*$B$3
15	2	=$B$11+$B$12	=$B$11*$B$6	=$B$12*$B$7	=C15+D15	=$B$9*($B$11+$B$12)	=B15-E15-F15	=$B$5*$B$3
16	3	=$B$11+$B$12	=$B$11*$B$6	=$B$12*$B$7	=C16+D16	=$B$9*($B$11+$B$12)	=B16-E16-F16	=$B$5*$B$3
17	4	=$B$11+$B$12	=$B$11*$B$6	=$B$12*$B$7	=C17+D17	=$B$9*($B$11+$B$12)	=B17-E17-F17	=$B$5*$B$3
18	5	=$B$11+$B$12	=$B$11*$B$6	=$B$12*$B$7	=C18+D18	=$B$9*($B$11+$B$12)	=B18-E18-F18	=$B$5*$B$3
19	6	=$B$11+$B$12	=$B$11*$B$6	=$B$12*$B$7	=C19+D19	=$B$9*($B$11+$B$12)	=B19-E19-F19	=$B$5*$B$3
20	7	=$B$11+$B$12	=$B$11*$B$6	=$B$12*$B$7	=C20+D20	=$B$9*($B$11+$B$12)	=B20-E20-F20	=$B$5*$B$3
21	8	=$B$11+$B$12	=$B$11*$B$6	=$B$12*$B$7	=C21+D21	=$B$9*($B$11+$B$12)	=B21-E21-F21	=$B$5*$B$3
22	9	=$B$11+$B$12	=$B$11*$B$6	=$B$12*$B$7	=C22+D22	=$B$9*($B$11+$B$12)	=B22-E22-F22	=$B$5*$B$3
23	10	=$B$11+$B$12	=$B$11*$B$6	=$B$12*$B$7	=C23+D23	=$B$9*($B$11+$B$12)	=B23-E23-F23	=$B$5*$B$3
24	11	=$B$11+$B$12	=$B$11*$B$6	=$B$12*$B$7	=C24+D24	=$B$9*($B$11+$B$12)	=B24-E24-F24	=$B$5*$B$3
25	12	=$B$11+$B$12	=$B$11*$B$6	=$B$12*$B$7	=C25+D25	=$B$9*($B$11+$B$12)	=B25-E25-F25	=$B$5*$B$3
26	13	=$B$11+$B$12	=$B$11*$B$6	=$B$12*$B$7	=C26+D26	=$B$9*($B$11+$B$12)	=B26-E26-F26	=$B$5*$B$3
27	14	=$B$11+$B$12	=$B$11*$B$6	=$B$12*$B$7	=C27+D27	=$B$9*($B$11+$B$12)	=B27-E27-F27	=$B$5*$B$3
28	15	=$B$11+$B$12	=$B$11*$B$6	=$B$12*$B$7	=C28+D28	=$B$9*($B$11+$B$12)	=B28-E28-F28	=$B$5*$B$3
29					=SUM(E14:E	=SUM(F14:F28)		
30								

	I	J
1	(F15.12) cont'd	
2		
3		
4		
5		
6		
7		
8		
9		
10		
11		
12		
13	SP Funds in Money Market	annual interest: Money Market -> SP
14	=B3+B4-B14+E14-H14	=I14*$B$8
15	=I14+J14-B15+E15-H15	=I15*$B$8
16	=I15+J15-B16+E16-H16	=I16*$B$8
17	=I16+J16-B17+E17-H17	=I17*$B$8
18	=I17+J17-B18+E18-H18	=I18*$B$8
19	=I18+J18-B19+E19-H19	=I19*$B$8
20	=I19+J19-B20+E20-H20	=I20*$B$8
21	=I20+J20-B21+E21-H21	=I21*$B$8
22	=I21+J21-B22+E22-H22	=I22*$B$8
23	=I22+J22-B23+E23-H23	=I23*$B$8
24	=I23+J23-B24+E24-H24	=I24*$B$8
25	=I24+J24-B25+E25-H25	=I25*$B$8
26	=I25+J25-B26+E26-H26	=I26*$B$8
27	=I26+J26-B27+E27-H27	=I27*$B$8
28	=I27+J27-B28+E28-H28	=I28*$B$8
29		
30		

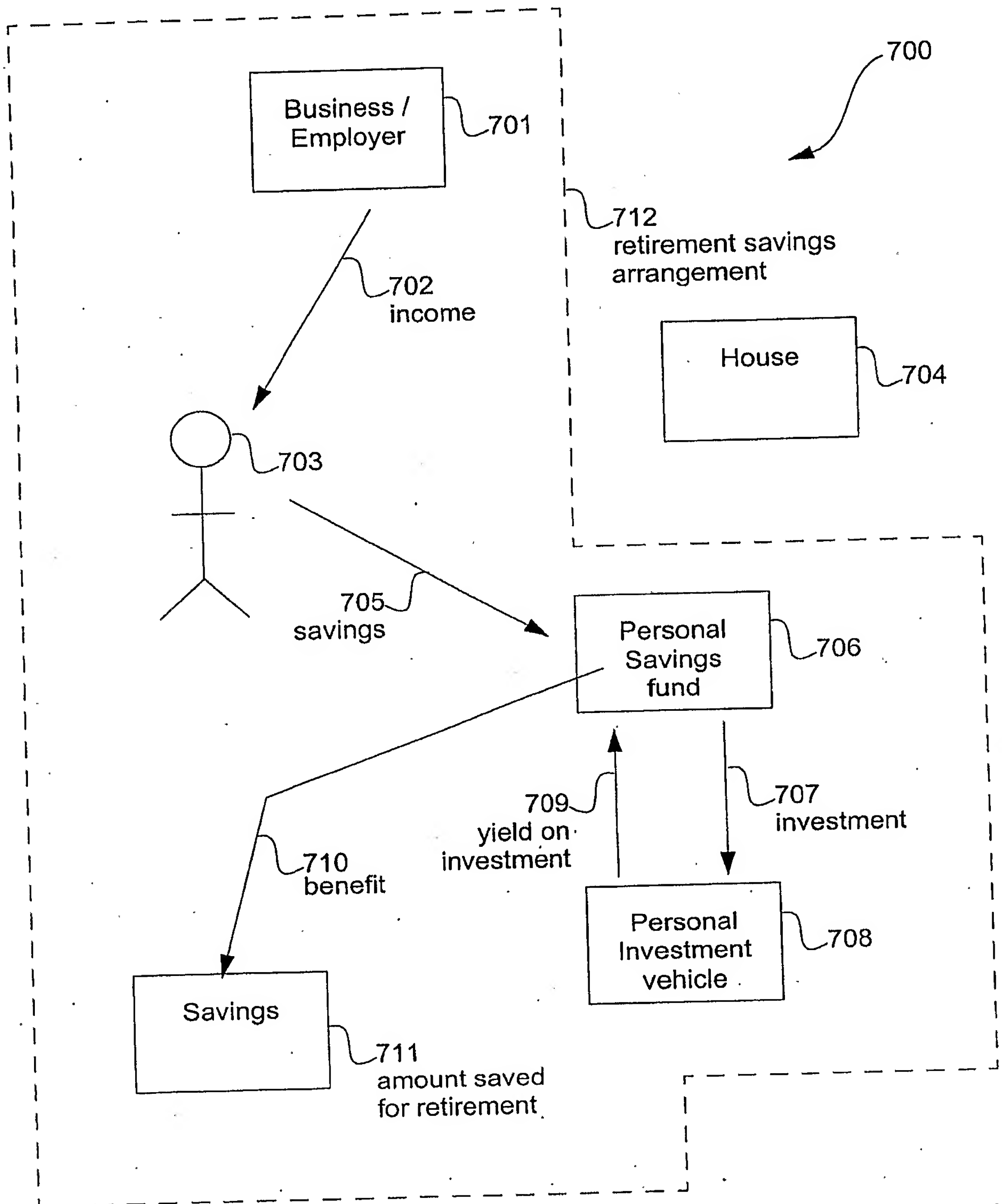

Fig. 1
prior art

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900

	A	B	C	D	E
1	**Present savings arrangement**				
2	annual salary	$150,000.00	**Funds available for retirement**		
3	salary increment	3.00%	**$351,649**		
4	superannuation contrib	9.00%			
5	investment yield	5.00%			
6	year	salary	super. Contrib. (P -> P.S. Fund)	funds available for investment	annual return from investment
7	1	$150,000.00	$13,500.00	$13,500.00	$675.00
8	2	$154,500.00	$13,905.00	$28,080.00	$1,404.00
9	3	$159,135.00	$14,322.15	$43,806.15	$2,190.31
10	4	$163,909.05	$14,751.81	$60,748.27	$3,037.41
11	5	$168,826.32	$15,194.37	$78,980.05	$3,949.00
12	6	$173,891.11	$15,650.20	$98,579.26	$4,928.96
13	7	$179,107.84	$16,119.71	$119,627.93	$5,981.40
14	8	$184,481.08	$16,603.30	$142,212.62	$7,110.63
15	9	$190,015.51	$17,101.40	$166,424.65	$8,321.23
16	10	$195,715.98	$17,614.44	$192,360.32	$9,618.02
17	11	$201,587.46	$18,142.87	$220,121.20	$11,006.06
18	12	$207,635.08	$18,687.16	$249,814.42	$12,490.72
19	13	$213,864.13	$19,247.77	$281,552.91	$14,077.65
20	14	$220,280.06	$19,825.21	$315,455.77	$15,772.79
21	15	$226,888.46	$20,419.96	$351,648.51	

Fig. 2
prior art

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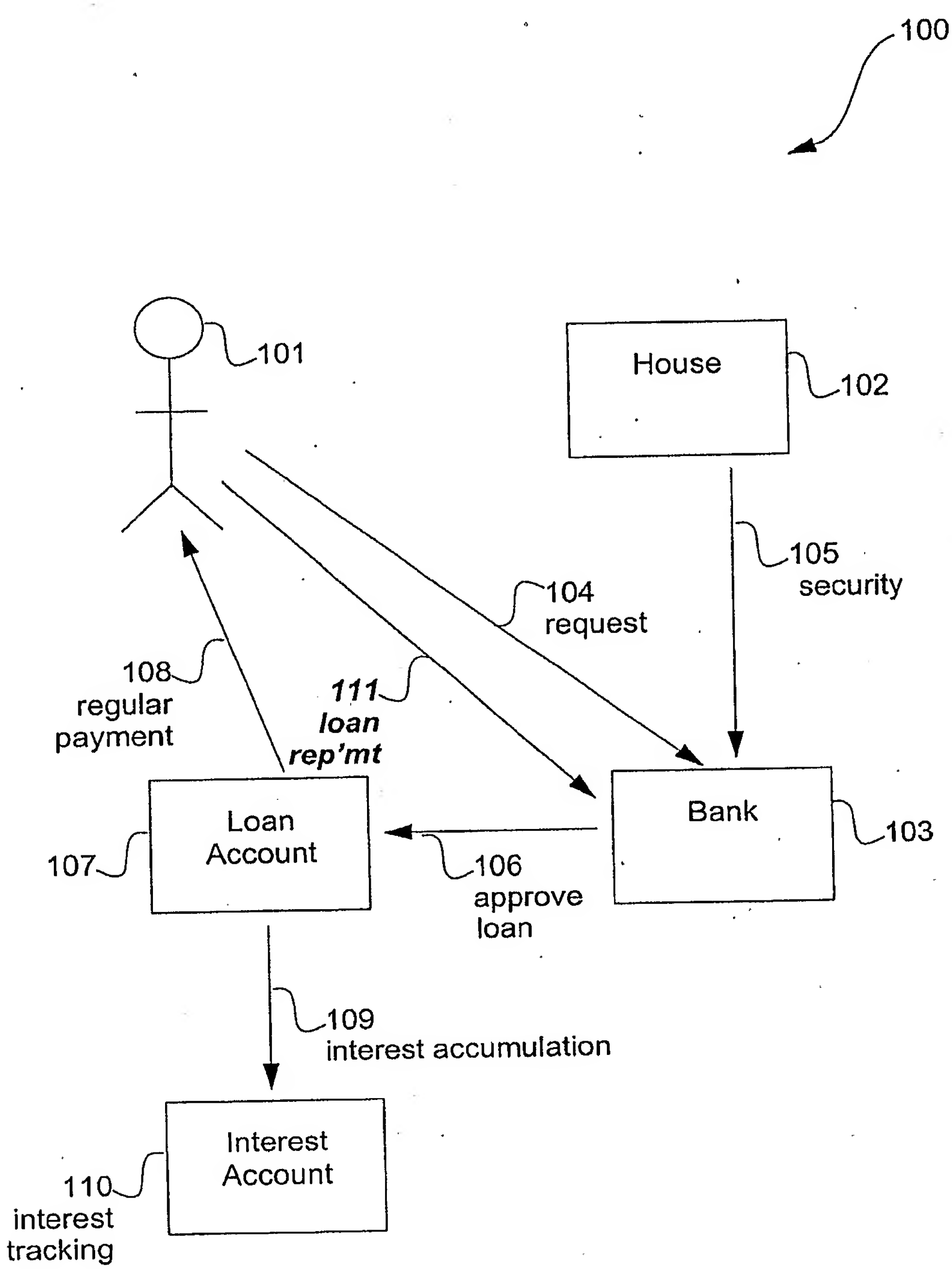

Fig. 3
prior art

200

	A	B	C	D	E	F
1	**Reverse Mortgage Arrangement**					
2	value of property	$1,000,000.00	**Amount to be repaid (Retiree > bank) after 15 yrs**			
3	amount of loan	$450,000.00	***$955,899.24***			
4	interest	8.95%				
5	loan term	15				
6	annual payment	$30,000.00				
7	home value increase rate	3.10%				
8	**year**	**payment**	**capital owed**	**interest owed**	**total owed**	**home value**
9	1	$30,000.00	$30,000.00	$2,685.00	$32,685.00	$1,000,000.00
10	2	$30,000.00	$60,000.00	$5,610.31	$68,295.31	$1,031,000.00
11	3	$30,000.00	$90,000.00	$8,797.43	$107,092.74	$1,062,961.00
12	4	$30,000.00	$120,000.00	$12,269.80	$149,362.54	$1,095,912.79
13	5	$30,000.00	$150,000.00	$16,052.95	$195,415.48	$1,129,886.09
14	6	$30,000.00	$180,000.00	$20,174.69	$245,590.17	$1,164,912.56
15	7	$30,000.00	$210,000.00	$24,665.32	$300,255.49	$1,201,024.85
16	8	$30,000.00	$240,000.00	$29,557.87	$359,813.36	$1,238,256.62
17	9	$30,000.00	$270,000.00	$34,888.30	$424,701.65	$1,276,642.57
18	10	$30,000.00	$300,000.00	$40,695.80	$495,397.45	$1,316,218.49
19	11	$30,000.00	$330,000.00	$47,023.07	$572,420.52	$1,357,021.26
20	12	$30,000.00	$360,000.00	$53,916.64	$656,337.16	$1,399,088.92
21	13	$30,000.00	$390,000.00	$61,427.18	$747,764.33	$1,442,460.68
22	14	$30,000.00	$420,000.00	$69,609.91	$847,374.24	$1,487,176.96
23	15	$30,000.00	$450,000.00	$78,524.99	**$955,899.24**	$1,533,279.45

Fig. 4
prior art

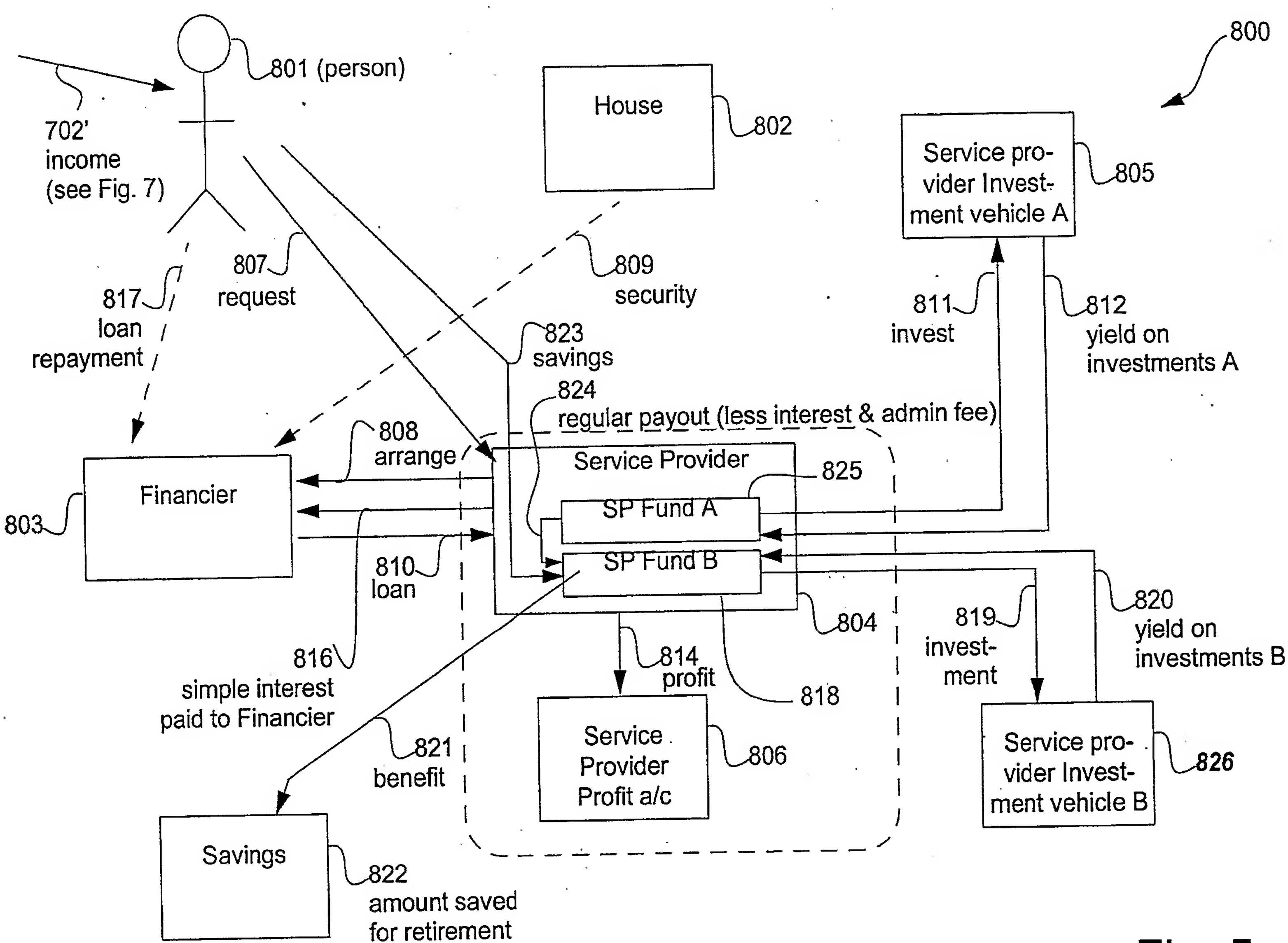
800
801 (person)
702'
income
(see Fig. 7)
House
802
Service pro-
vider Invest-
ment vehicle A
805
817
loan
repayment
807
request
809
security
811
invest
812
yield on
investments A
823
savings
824
regular payout (less interest & admin fee)
808
arrange
Service Provider
825
Financier
803
SP Fund A
SP Fund B
810
loan
804
819
invest-
ment
820
yield on
investments B
816
simple interest
paid to Financier
814
profit
818
Service
Provider
Profit a/c
806
Service pro-
vider Invest-
ment vehicle B
826
821
benefit
Savings
822
amount saved
for retirement

Fig. 5

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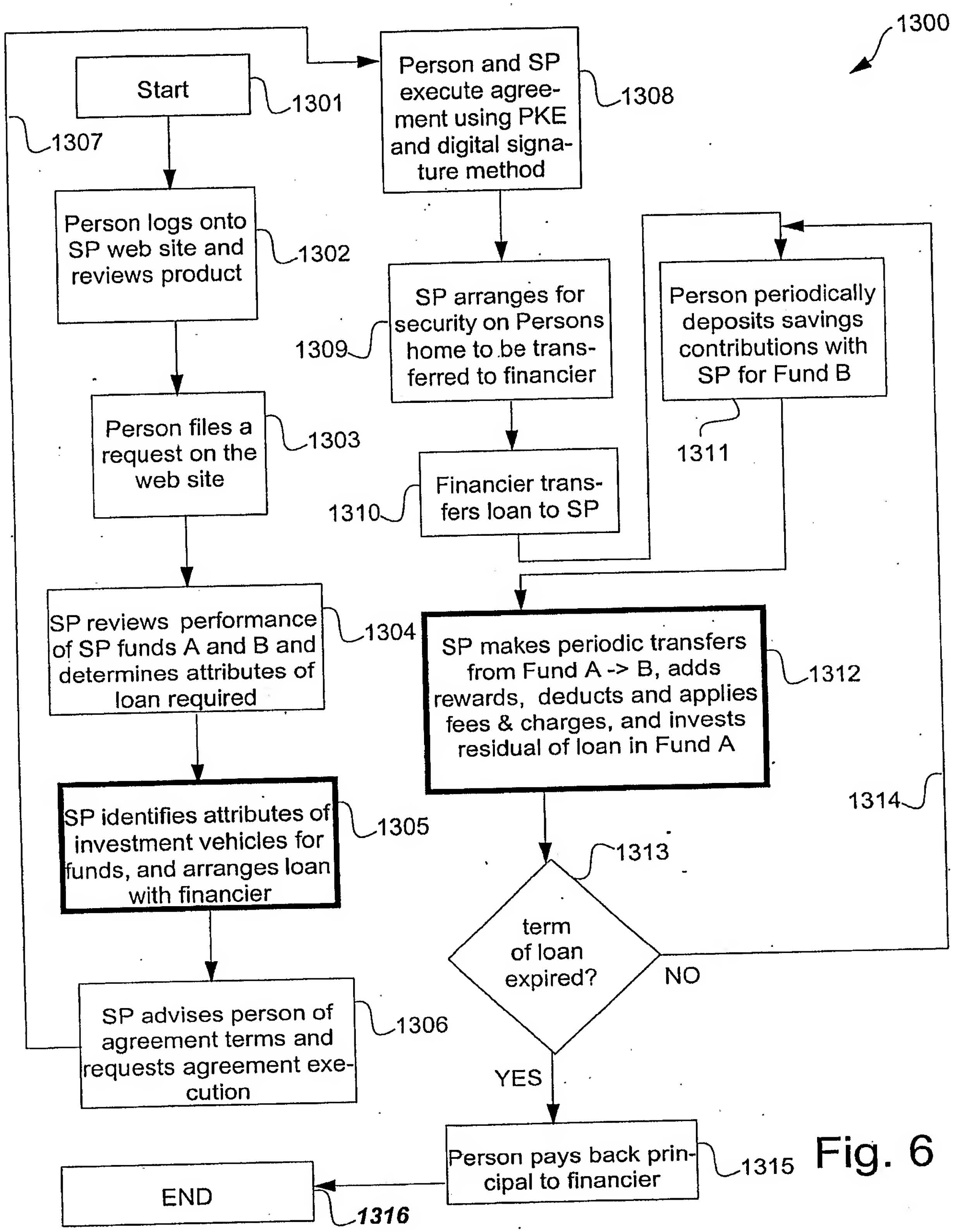

Fig. 6

1000

	A	B	C	D	E	F	G	H	I	J	K	L	M
1	Retirement savings arrangement												
2	equity in property			$500,000									
3	amount of loan (financier -> SP)			$225,000									
4	simple interest (SP -> financier)			5.00%	Funds available for retirement								
5	simple interest (P -> SP)			8.95%	$418,120.96								
6	loan term			15									
7	annual payout (SP -> SP Fund B)			$15,000									
8	admin charge (Retiree > SP)			1.00%									
9	annual salary (PA)			$150,000									
10	salary increment (PA)			3.00%									
11	Superannuation contribution			9.00%									
12	Investment yield on SP Fund A			8.95%									
13	Investment yield on SP Fund B			5.00%									
14	home value increase rate			3.10%									
15	balance of SP Fund B available at term			$418,120.96									
16	year	salary	annual savings (super. Contrib.) (P -> S.P. Fund B)	Gross annual Loan payout (SP fund A -> SP fund B)	Annual interest (P -> SP)	Annual admin fee (P -> SP)	Net annual Loan payout (SP fund A -> SP fund B)	SP Fund B available for investment	Annual return from SP Fund B	Annual interest (SP -> financier)	SP Fund A available for investment	Annual return from SP Fund A	Home market value
17	1	$150,000.00	$13,500.00	$15,000.00	$1,342.50	$150.00	$13,507.50	$27,007.50	$1,350.38	$11,250.00	$200,242.50	$17,921.70	$500,000.00
18	2	$154,500.00	$13,905.00	$15,000.00	$1,342.50	$150.00	$13,507.50	$55,770.38	$2,788.52	$11,250.00	$193,406.70	$17,309.90	$515,500.00
19	3	$159,135.00	$14,322.15	$15,000.00	$1,342.50	$150.00	$13,507.50	$86,388.54	$4,319.43	$11,250.00	$185,959.10	$16,643.34	$531,480.50
20	4	$163,909.05	$14,751.81	$15,000.00	$1,342.50	$150.00	$13,507.50	$118,967.29	$5,948.36	$11,250.00	$177,844.94	$15,917.12	$547,956.40
21	5	$168,826.32	$15,194.37	$15,000.00	$1,342.50	$150.00	$13,507.50	$153,617.52	$7,680.88	$11,250.00	$169,004.57	$15,125.91	$564,943.04
22	6	$173,891.11	$15,650.20	$15,000.00	$1,342.50	$150.00	$13,507.50	$190,456.09	$9,522.80	$11,250.00	$159,372.97	$14,263.88	$582,456.28
23	7	$179,107.84	$16,119.71	$15,000.00	$1,342.50	$150.00	$13,507.50	$229,606.11	$11,480.31	$11,250.00	$148,879.36	$13,324.70	$600,512.42
24	8	$184,481.08	$16,603.30	$15,000.00	$1,342.50	$150.00	$13,507.50	$271,197.21	$13,559.86	$11,250.00	$137,446.56	$12,301.47	$619,128.31
25	9	$190,015.51	$17,101.40	$15,000.00	$1,342.50	$150.00	$13,507.50	$315,365.96	$15,768.30	$11,250.00	$124,990.53	$11,186.65	$638,321.29
26	10	$195,715.98	$17,614.44	$15,000.00	$1,342.50	$150.00	$13,507.50	$362,256.20	$18,112.81	$11,250.00	$111,419.68	$9,972.06	$658,109.25
27	11	$201,587.46	$18,142.87	$15,000.00	$1,342.50	$150.00	$13,507.50	$412,019.38	$20,600.97	$11,250.00	$96,634.24	$8,648.76	$678,510.63
28	12	$207,635.08	$18,687.16	$15,000.00	$1,342.50	$150.00	$13,507.50	$464,815.01	$23,240.75	$11,250.00	$80,525.50	$7,207.03	$699,544.46
29	13	$213,864.13	$19,247.77	$15,000.00	$1,342.50	$150.00	$13,507.50	$520,811.03	$26,040.55	$11,250.00	$62,975.04	$5,636.27	$721,230.34
30	14	$220,280.06	$19,825.21	$15,000.00	$1,342.50	$150.00	$13,507.50	$580,184.29	$29,009.21	$11,250.00	$43,853.80	$3,924.92	$743,588.48
31	15	$226,888.46	$20,419.96	$15,000.00	$1,342.50	$150.00	$13,507.50	$643,120.96		$11,250.00	$23,021.22		$766,639.72

Fig. 7

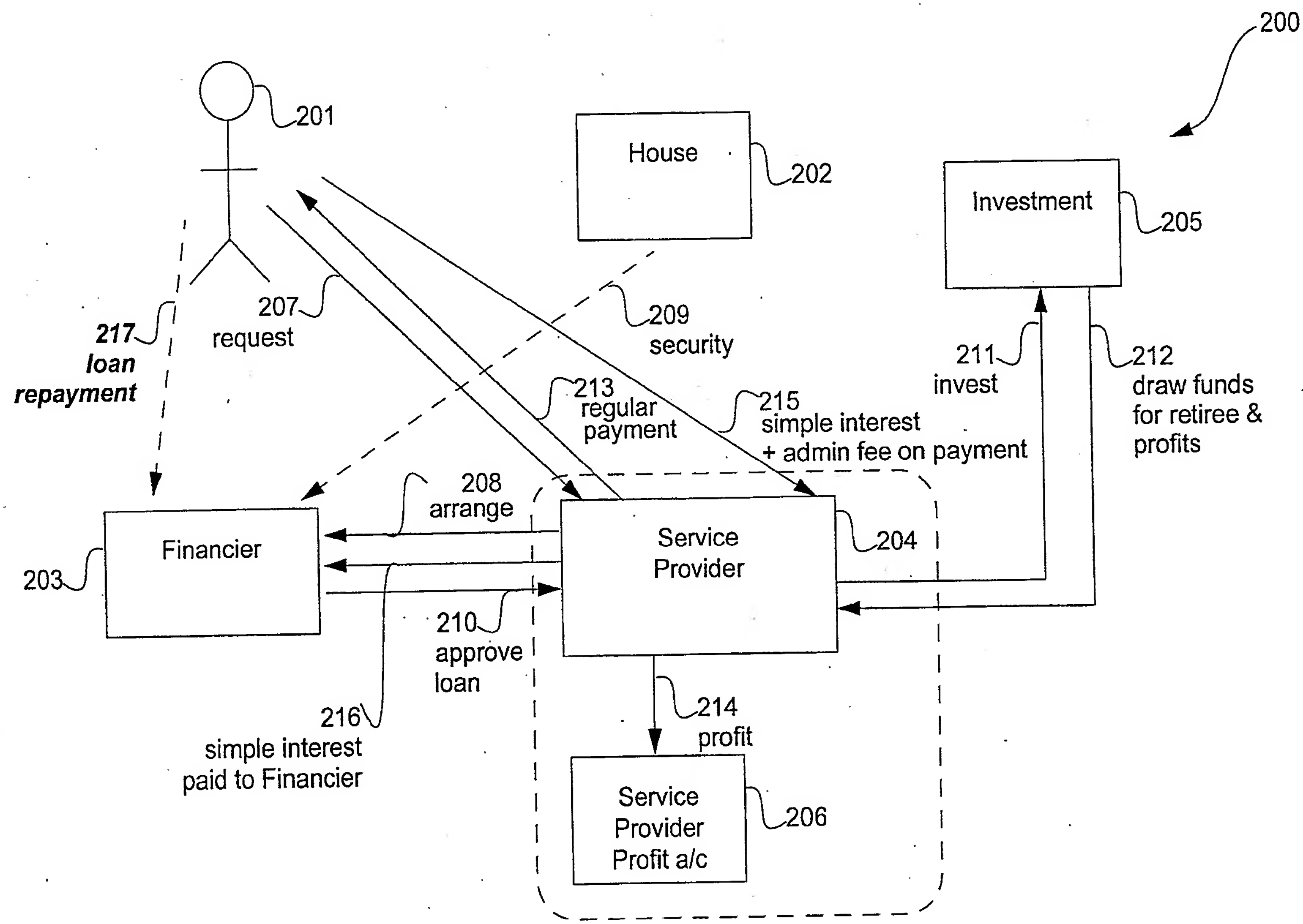
200
201
House
202
Investment
205
217
loan
repayment
207
request
209
security
211
invest
212
draw funds
for retiree &
profits
213
regular
payment
215
simple interest
+ admin fee on payment
208
arrange
Financier
203
Service
Provider
204
210
approve
loan
216
simple interest
paid to Financier
214
profit
Service
Provider
Profit a/c
206

Fig. 8

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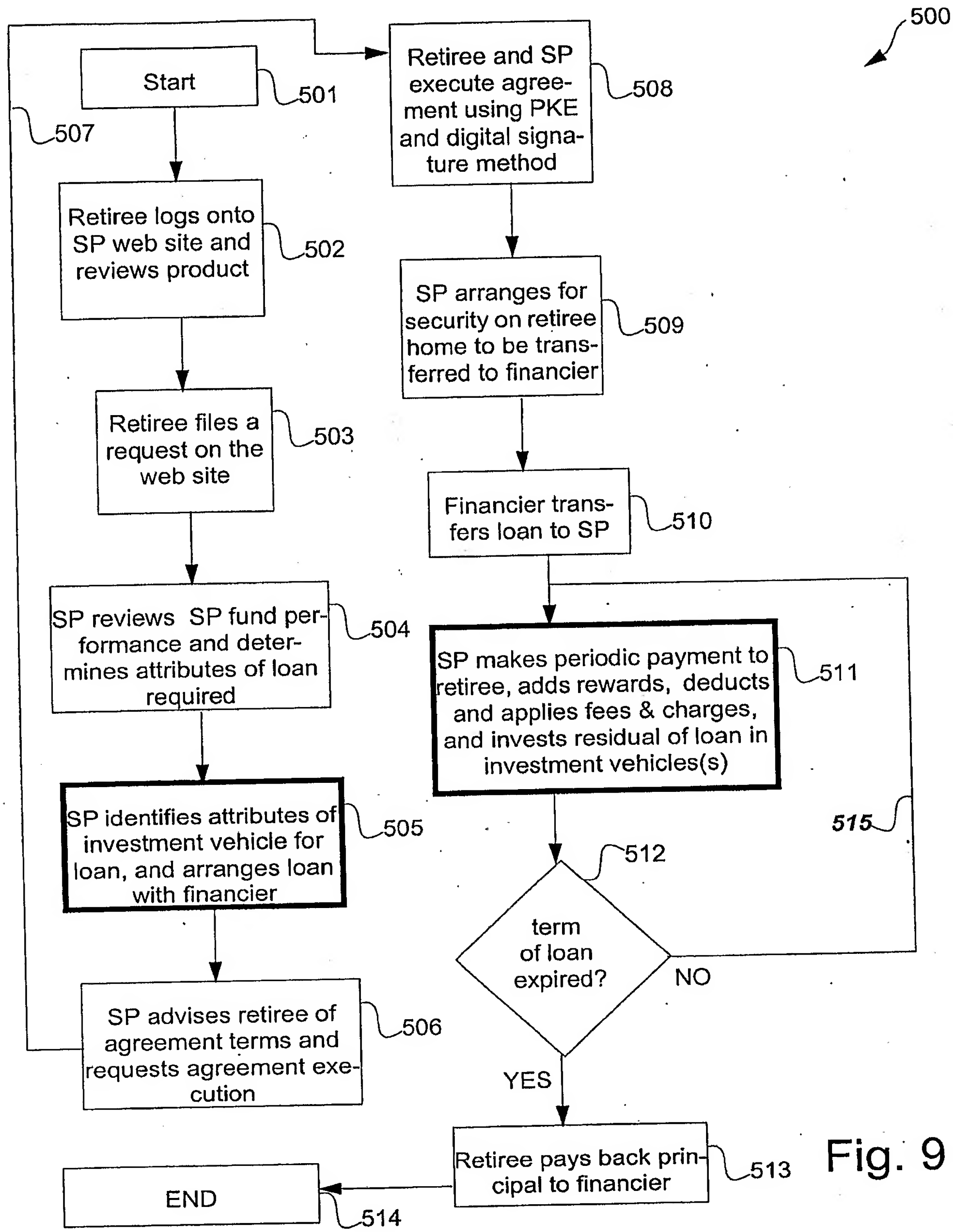

Fig. 9

10/13

500

	A	B	C	D	E	F	G	H
1	**Retirement Annuity Arrangement**							
2	value of property	$1,000,000.00	**Retiree annual payments + loan repayment after 15 yrs (Retiree > Financier)**					
3	amount of loan	$450,000.00	***$495,274.66***					
4	interest (SP > Financier)	4.67%						
5	interest (Retiree > SP)	8.95%						
6	interest (Money Market > SP)	8.95%						
7	admin charge (Retiree > SP)	0.20%						
8	loan term (term)	15						
9	annual payment	$32,987.00						
10	year	annual payment: SP > Retiree	annual interest: Retiree > SP	annual admin charge: Retiree > SP	annual net payment: SP > Retiree	annual interest: SP > Financier	SP Funds in Money Market	annual interest: Money Market > SP
11	1	$32,987.00	$2,952.34	$65.97	$29,968.69	$21,015.00	$398,950.34	$35,706.06
12	2	$32,987.00	$2,952.34	$65.97	$29,968.69	$21,015.00	$383,606.73	$34,332.80
13	3	$32,987.00	$2,952.34	$65.97	$29,968.69	$21,015.00	$366,889.87	$32,836.64
14	4	$32,987.00	$2,952.34	$65.97	$29,968.69	$21,015.00	$348,676.85	$31,206.58
15	5	$32,987.00	$2,952.34	$65.97	$29,968.69	$21,015.00	$328,833.76	$29,430.62
16	6	$32,987.00	$2,952.34	$65.97	$29,968.69	$21,015.00	$307,214.72	$27,495.72
17	7	$32,987.00	$2,952.34	$65.97	$29,968.69	$21,015.00	$283,660.77	$25,387.64
18	8	$32,987.00	$2,952.34	$65.97	$29,968.69	$21,015.00	$257,998.75	$23,090.89
19	9	$32,987.00	$2,952.34	$65.97	$29,968.69	$21,015.00	$230,039.97	$20,588.58
20	10	$32,987.00	$2,952.34	$65.97	$29,968.69	$21,015.00	$199,578.89	$17,862.31
21	11	$32,987.00	$2,952.34	$65.97	$29,968.69	$21,015.00	$166,391.53	$14,892.04
22	12	$32,987.00	$2,952.34	$65.97	$29,968.69	$21,015.00	$130,233.91	$11,655.94
23	13	$32,987.00	$2,952.34	$65.97	$29,968.69	$21,015.00	$90,840.18	$8,130.20
24	14	$32,987.00	$2,952.34	$65.97	$29,968.69	$21,015.00	$47,920.72	$4,288.90
25	15	$32,987.00	$2,952.34	$65.97	$29,968.69	$21,015.00	$1,159.96	$103.82

Fig. 10

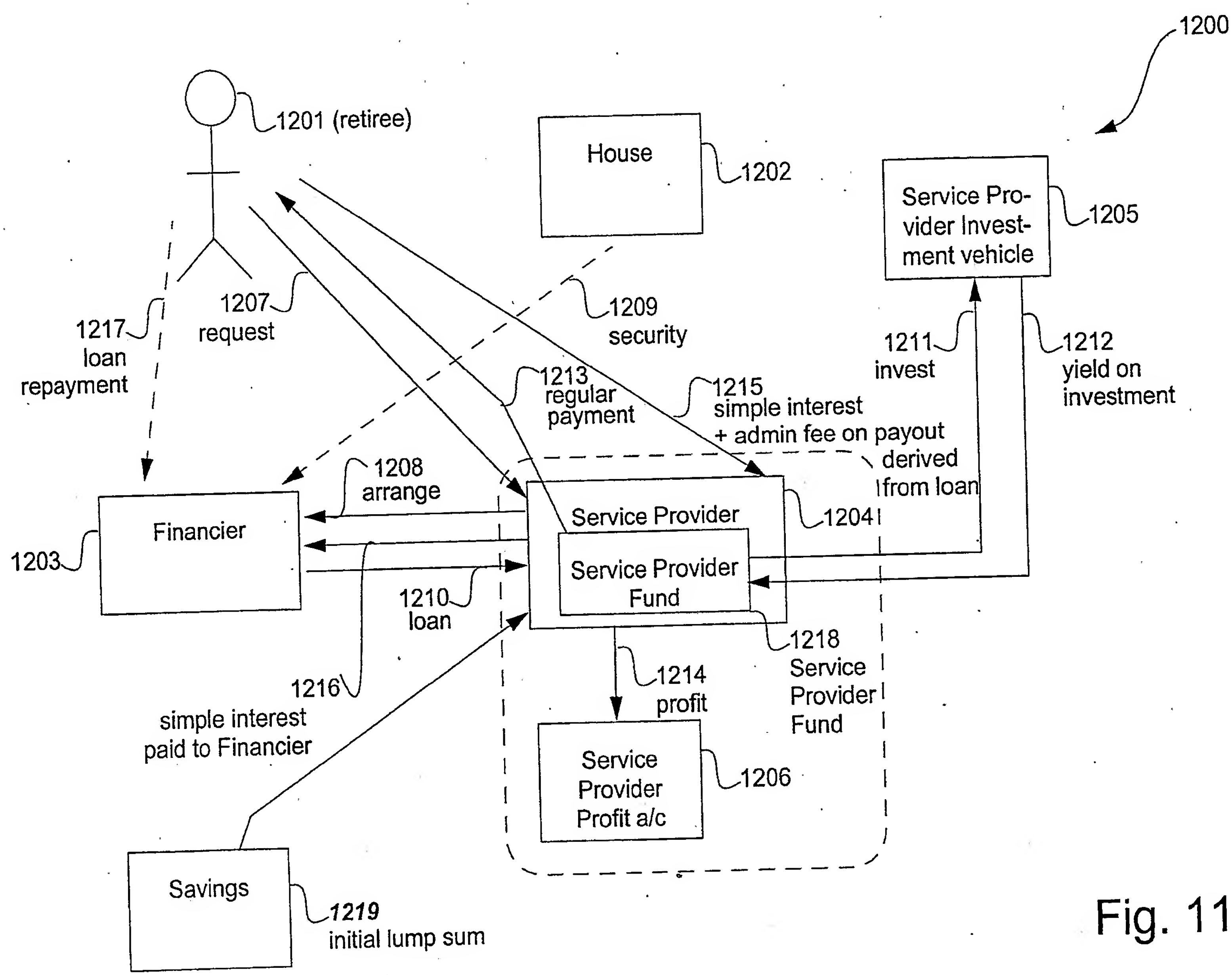
1200
1201 (retiree)
House
1202
Service Pro-
vider Invest-
ment vehicle
1205
1217
loan
repayment
1207
request
1209
security
1211
invest
1212
yield on
investment
1213
regular
payment
1215
simple interest
+ admin fee on payout
derived
from loan
1208
arrange
Financier
1203
Service Provider
1204
Service Provider
Fund
1210
loan
1218
Service
Provider
Fund
1216
simple interest
paid to Financier
1214
profit
Service
Provider
Profit a/c
1206
Savings
1219
initial lump sum

Fig. 11

1100

	A	B	C	D	E	F	G	H	I	J
1	**Retirement Annuity Arrangement**									
2	value of property	$1,000,000.00								
3	amount of loan	$450,000.00	**Retiree annual payments + loan repayment after 15 yrs (Retiree > Financier)**							
4	initial lump sum	$418,120.96	*$496,543.66*							
5	interest (SP -> Financier)	4.67%								
6	interest on loan payouts (Retiree -> SP)	8.95%								
7	interest on lump sum payouts (Retiree -> SP)	0.00%								
8	interest (Money Market -> SP)	8.95%								
9	admin charge (Retiree -> SP)	0.20%								
10	loan term (term)	15								
11	annual payout from loan (SP -> R)	$32,987.00								
12	annual payout from lump sum (SP ->R)	$42,300.00								
13	year	annual payment: SP -> Retiree	annual interest on loan component: Retiree -> SP	annual interest on lump sum component: Retiree ->	total annual interest charges Retiree -> SP	annual admin charge: Retiree -> SP	annual net payment: SP -> Retiree	annual interest: SP -> Financier	SP Funds in Money Market	annual interest: Money Market -> SP
14	1	$75,287.00	$2,952.34	$0.00	$2,952.34	$150.57	$72,184.09	$21,015.00	$774,771.30	$69,342.03
15	2	$75,287.00	$2,952.34	$0.00	$2,952.34	$150.57	$72,184.09	$21,015.00	$750,763.67	$67,193.35
16	3	$75,287.00	$2,952.34	$0.00	$2,952.34	$150.57	$72,184.09	$21,015.00	$724,607.35	$64,852.36
17	4	$75,287.00	$2,952.34	$0.00	$2,952.34	$150.57	$72,184.09	$21,015.00	$696,110.05	$62,301.85
18	5	$75,287.00	$2,952.34	$0.00	$2,952.34	$150.57	$72,184.09	$21,015.00	$665,062.23	$59,523.07
19	6	$75,287.00	$2,952.34	$0.00	$2,952.34	$150.57	$72,184.09	$21,015.00	$631,235.64	$56,495.59
20	7	$75,287.00	$2,952.34	$0.00	$2,952.34	$150.57	$72,184.09	$21,015.00	$594,381.56	$53,197.15
21	8	$75,287.00	$2,952.34	$0.00	$2,952.34	$150.57	$72,184.09	$21,015.00	$554,229.05	$49,603.50
22	9	$75,287.00	$2,952.34	$0.00	$2,952.34	$150.57	$72,184.09	$21,015.00	$510,482.89	$45,688.22
23	10	$75,287.00	$2,952.34	$0.00	$2,952.34	$150.57	$72,184.09	$21,015.00	$462,821.44	$41,422.52
24	11	$75,287.00	$2,952.34	$0.00	$2,952.34	$150.57	$72,184.09	$21,015.00	$410,894.30	$36,775.04
25	12	$75,287.00	$2,952.34	$0.00	$2,952.34	$150.57	$72,184.09	$21,015.00	$354,319.67	$31,711.61
26	13	$75,287.00	$2,952.34	$0.00	$2,952.34	$150.57	$72,184.09	$21,015.00	$292,681.62	$26,195.01
27	14	$75,287.00	$2,952.34	$0.00	$2,952.34	$150.57	$72,184.09	$21,015.00	$225,526.96	$20,184.66
28	15	$75,287.00	$2,952.34	$0.00	$2,952.34	$150.57	$72,184.09	$21,015.00	$152,361.96	$13,636.40

Fig. 12

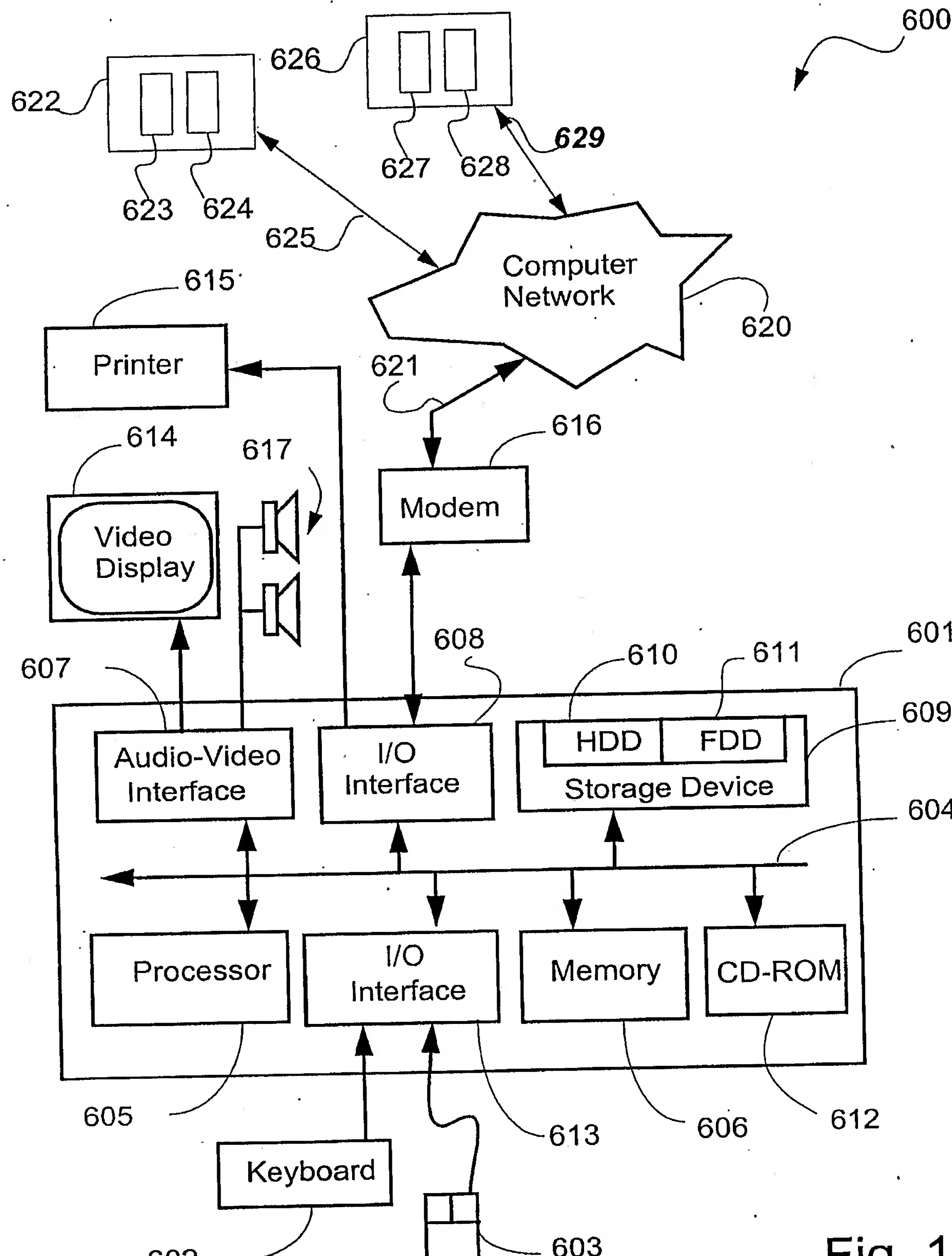
600
622
623
624
626
627
628
629
625
Computer Network
620
615
Printer
621
616
Modem
614
Video Display
617
608
607
Audio-Video Interface
I/O Interface
610
HDD
611
FDD
Storage Device
601
609
604
Processor
I/O Interface
Memory
CD-ROM
605
613
606
612
Keyboard
602
603

Fig. 13